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THE

CALCUTTA REVIEW.

VOLUME LVII.

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No man who hath tasted learning but will confess the many ways of profiting by those who, not contented with stale receipts, are able to manage and set forth new positions to the world: and, were they but as the dust and cinders of our feet, so long as in that notion they may yet serve to polish and brighten the armoury of truth, even for that respect they were not utterly to be cast away.—MILTON.

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CALCUTTA REVIEW.

No. CXIV.

CONTENTS.

	PAGE.
I.—ALEXIS DE TOCQUEVILLE ...	217
II.—THE TAJ.	
A Translation from the Persian ...	233
III.—BERKELEY AND HAMILTON AS PRESENTATIONISTS ...	238
IV.—THE MODERN HINDU DRAMA ...	245
V.—CHRISTENDOM AND ISLAM.	
A Critical Examination of the Life and Teachings of Muhammad. By Syed Ameer Ali, Moulvi, M.A., LL B., of the Inner Temple, Barrister-at-law, London	274
VI.—RIFLED ARTILLERY.	
A Paper for the General Reader ...	311
VII.—MADRAS STATESMANSHIP ...	330
VIII.—MILITARY NOTIONS.	
1.—Proceedings of the United Service Institution of India. May 1873.	
2.—Cavalry at the Camp. By Captain Osmond Barnes.	
3.—My Diary at the Punjab Camp of Exercise, 1872-73. By Beechwood ...	335
IX.—THE RE-ORGANISATION OF THE INDIAN MEDICAL DEPARTMENT ...	353
X.—ON METHODS OF OBSERVING INDIAN PHENOMENA ...	360
RY:—	
THERMOPILE ...	392
ICAL NOTICES:—	
—VERNACULAR LITERATURE:—	
Bishabriksa. A Tale. By Bankim Chandra Chattopadhyay. Kānthāpārā. 1280	...

	PAGE.
Hindudarmamarma. An Exposition of the principles of the Hindu Creed. By the late Loknāth Basu. Second edition : Calcutta. Kāvyaaprakāśh Press. 1280 ...	vi
Visayāchandrahās Kāvya. By Navina Chandra Chattopādhyāya. Calcutta School Book Press ...	ix
The Meghaduta. By Kalidāsa, with the commentary of Malinatha. Edited by Prānnāth Pandit ; with numerous parallel passages from other Sanskrit writers, and various readings, together with a Bengāli metrical translation. Vālmiki Press. Calcutta ...	xi
The Bangadarsana and the Bahuvivāha. A Pamphlet ...	xvi
Jayadeva Charita : Or a short Biographical account of Jayadeva, the celebrated Author of the sweet Lyric Poem Gīta Govinda. By Rajanī Kanta Gupta. Calcutta : G. P. R. & Co's Press. Samvat 1939 ...	xviii
Hemaprabhā Nātaka. By Kamallochan Mukhopādhyāya. Calcutta : Samāchār Chandiikā Press. 1280 ...	xix
2.—GENERAL LITERATURE :—	
Annals and Antiquities of Rājasthān, or the Central and Western Rajpoot States of India. By Lieutenant-Colonel James Tod, late Political Agent to the Western Rajpoot States. Second Edition. Higginbotham and Co. : Madras. 1873 ...	xx
A Cyclopædia of India, and of Eastern and Southern Asia —Commercial, Industrial and Scientific : Products of the Mineral, Vegetable and Animal Kingdoms, Useful Arts and Manufactures. Edited by Edward Balfour, L.R.C.S.E., Deputy Inspector General of Hospitals, Madras Army ; Corresponding Member of the Imperial Geographical Institute, Vienna. Madras : 1871 ...	xxvi

THE CALCUTTA REVIEW.

N^o CXIV.

ART. I.—ALEXIS DE TOCQUEVILLE.

WHEN the calamity of the Mutiny fell upon our Indian Empire, and the event of that terrible struggle hung in uncertainty, the nature of the crisis was studied and its progress watched with the deepest sympathy by two foreigners of European celebrity, Alexis de Tocqueville and the Count de Montalembert. It would be difficult to find two persons more competent to form an enlightened judgment on the advantages or the evils of the English dominion in India. Both were men who had devoted brilliant talents to the cause of liberty and civilization, and both blended the ardent studies of the philosopher with the practical experience of the statesman. As foreigners they stood aloof from those party struggles which bias the minds of Englishmen on all national questions, and they were free from that peculiar spirit which often leads Englishmen to pass heavy censures on the acts of their own countrymen. On the other hand they were both so far connected with England by family ties, the one by marriage the other by descent, as to possess a knowledge of her institutions and history unusual in foreigners. It is not a little gratifying to those who amid the toils and trials of Indian life cheer themselves with the thought that they are not selfishly labouring for themselves alone, but are employed on a great and noble work, a work which is already bearing good fruit and will hereafter do so more abundantly, to be supported in this hope by the opinions of two such men. It was cheering in the midst of these our greatest difficulties to find that while some of our own countrymen saw, in the mutinies, the rising of a people against a foreign ruler and hated institutions, these more impartial lookers-on saw only one of the struggles of barbarism against civilization, and hopefully predicted it a final one.

Count de Montalembert's mother was the daughter of a Bombay Civilian, the amiable author of the "Oriental Memoirs;" and

may be thought to have had an hereditary affection for our Indian rule. But Tocqueville, far from any such bias, had made the subject of our Indian Empire his careful study. He had explored the history of our dependencies there with the view of finding the principles which should guide France in the government of Algeria, and had been led by these studies, not only to plan, but to commence a work on the settlement of the English in India. It will ever be a subject of deep regret that this design was interrupted by the distractions of public life and finally abandoned. It is difficult to overrate the value which such a work would have possessed. But it was left in a state which precluded its publication, and in the collected works of Tocqueville, lately completed by his biographer, this work does not find a place. There are, however, passages, both in his finished works and scattered throughout his correspondence and the remains now published, which give some indications of the writer's views with regard to our Indian rule. We have thought it may not be uninteresting to our readers, who have not yet made themselves familiar with the writings of this great thinker, if we endeavour to glean and bring together some of the more important of these passages; and the task will certainly not be without use if any are thereby induced to make a closer study of the author. The writings of Tocqueville have taken their place by the side of those of Montesquieu, and must ever form one of the best studies of Indian statesmen.

We are the more induced to undertake this review because many of the works of Tocqueville have never been translated into English, and the collected edition may not often be accessible in India.

But as the opinions of an author are valued in proportion to our assurance of his competency to form a sound judgment, and we are interested in knowing the process of study and experience by which his mind was trained and his judgment ripened, we propose in this article to give a short sketch of Tocqueville's life, as given by his friend and biographer, and, if we are not greatly mistaken, many of our readers will be interested by this slight sketch of the career of one who was not "rocked and dandled" into statesmanship, but won his position by much the same trials as are now moulding so many statesmen in this country.

Alexis Charles Henry Clerel de Tocqueville was born at Paris on the 29th July, 1805. His father, the Count de Tocqueville, one of the landed gentry of Normandy, held under the Restoration successively the prefectures of Metz, of Amiens, and of Versailles, and was a peer of France. He was also an author of some eminence, having written successfully on the reigns of Louis XV. and Louis XVI. His mother, of the family of Pelletier

de Rosambo, was a granddaughter of Malesherbes. Tocqueville's early education was conducted at home, and he is described by his biographer as having learnt little, "if we can count as little, good manners and good sentiments." And we may here remark that through life family ties and domestic affections retained their hold on Tocqueville's heart in an eminent degree. His studies properly began with his entrance to the College of Metz, on his father being appointed Prefect of that town. There, though weak in Latin and Greek, he from the first took the lead in French composition; and in 1822 he carried off the prize of rhetoric and thus closed with distinction his academical career.

But the real studies of Tocqueville were now to commence, and the true bent of his intellect to be discovered. In 1826 he set out in company with an elder brother on a journey which took them through Italy and into Sicily. With that diligence which he convinced through life, he went through the course of ordinary students. He visited every museum, noted every picture and every medal, and began a careful study of the principles of architecture. He even commenced a work of imagination. In the style of our early essayists, after a day of fatigue in exploring the ruins of Rome, he supposes himself to have ascended the Capitol on the side of the Campo Vaccino, and there overcome with fatigue to have thrown himself on the ground, and fallen asleep. While he sleeps Rome in all her ancient grandeur appears before him, and so on, in the style of the writers of France, Italy, and England a century ago. But this was evidently not the bent of Tocqueville's mind, which, however, was soon to appear. "In his journey in Sicily where he was a witness of the miseries which a detestable government inflicted upon the people, he was led to meditate on those first principles upon which the prosperity or misery of peoples depends." To study, analyse, and describe living men and modern institutions was henceforth his congenial task.

He was now to be introduced to official life, and in 1826 on reaching his majority was recalled from his travels by his appointment as "Juge auditor" at Versailles, where his father was now Prefect.

"Had Alexis de Tocqueville been an ordinary man," his biographer observes, "his career might have been considered to be now marked out. His name, his family, his social position, his career, all seemed to point out the road to be followed. Grandson of Malesherbes, was he not sure of reaching the highest post of the magistracy even without effort, and by the mere efflux of time. Young, amiable, related to all the best families, justified in aspiring to one of the highest matrimonial connexions, and such indeed had already been offered to him, he

"would have espoused some rich heiress. His life confined to a narrow circle, would henceforward have flowed on gently and respectfully, it is true, in the regular fulfilment of the duties of his office, surrounded by the comforts which a good salary affords, in the midst of the interests, limited but certain, of the magistracy and of the modest and peaceful enjoyments of private life."

The life thus pictured was not suited to the tastes or the character of Tocqueville, who from the first was resolved to owe his advancement to himself alone; and, as the office which he held did not offer any opening to his talents, he solicited and obtained permission to take part in the duties of the "Ministère public."

It was in the discharge of these duties that he gained the friendship of a colleague, his future biographer, who is able to describe the rest of his career from personal knowledge, and recalls with pleasure the indications which his friend then afforded of future eminence; and dwells with fond recollection on their mutual studies and mutual aspirations. In many respects we are forcibly reminded of the biography of one of our own countrymen between whom and our present subject we see a remarkable similarity, we mean Francis Horner. "Is it necessary," Tocqueville's biographer writes, "to say that a mind so greedy of independence, of space, often roved beyond the narrow sphere of the law, to which the duties of his profession alone attached him, to enter on the arena, at that time so freely open, of the general questions of politics. When the task of judicial functions was accomplished, as soon as the duties of the sessions and the bar were fulfilled, the two colleagues, now friends, united by the tie of common tastes, as well as similarity of ideas and opinions, threw themselves upon their self selected studies and above all those which had history for their object. Then what diligence! what emulation! what charms in this life of labour! what sincerity in the pursuit of all that is true! what reaching forward to the future, to a future unbounded, unclouded, such as the generous passions and the trust of youth open out to the ardent spirits and generous hearts, at an epoch believing and impassioned.

"Those who know not that epoch (1827-28), and who know only the self-indulgence and indifference of the present, can scarcely comprehend the glow of those days. Twelve years had elapsed since the Empire fell. For the first time had France known liberty and loved her. That liberty a consolation for some, a sovereign good to others, had created a new country for all. Institutions had taken the place of a single man. New manners, the development of individual instincts in the

"midst of profound peace, opinions, necessities till then unknown, all had contributed to pour new life into a nation born again. Yes, it must be admitted that then, within the old parties of the Revolution and of the Empire, whose liberalism was but a lie; in the midst of differences inherent in liberty itself, there was then a France sincerely liberal, passionately attached to her new institutions, jealous to sustain them, prompt to take alarm at their dangers, and seeing in their maintenance or in their fall the success or the reverse of her own destiny. It was the first time that the great problem of constitutional liberty was seriously tried in France."

We have given this passage at length, because viewed by the light of subsequent events, the Revolution of 1830, the overthrow of Louis Philippe, the Republic, the Second Empire, it seems to put forcibly before us the trials for which such a mind as Tocqueville's had to arm itself in entering on public life.

Tocqueville was himself, both from hereditary feelings and calm judgment, sincerely attached to constitutional monarchy; but his enquiring and almost anxious turn of mind showed him only too clearly the dangers which were gathering round it in France. "Eminently practical in all his speculations, he studied the past only with a view to the present, and he studied foreign countries only with reference to his own." He was an ardent lover of liberty, but he felt that in France the tendency of the revolution which he saw now in progress was towards equality not towards liberty; and indeed in this spirit of equality he saw the greatest danger that liberty had to fear. "Already those great problems had set themselves to his mind which were to occupy his life and for the study of which he was one day to interrogate the New World. How could that equality which separates and isolates men, how could it consist with liberty? How could that power which emanates from democracy be prevented from becoming a tyranny? Where find a force to counteract it, where men are all equal it is true, but therefore all equally weak? Is the future of modern society to be at the same time democracy and despotism? Such were the questions which from this time occupied his thoughts and troubled his mind."

The Revolution of July came and realised many of Tocqueville's anticipations, and some of his fears. In the fall of the elder branch of the House of Bourbon he saw a severe blow to constitutional monarchy. But the constitution of 1830 was a second, and perhaps a last, attempt to establish this principle in France; and Tocqueville gave in his adhesion though he was far from sharing the enthusiasm of the day. Within six months he was on his way to America.

More than ever convinced that France was hastening towards

democracy, and that in this direction lay her perils, he longed to study the institutions of that great country in which democracy and liberty were then co-existent. He proposed to his colleague and friend to join him, and the proposal was received with alacrity; but, being both of them in official employment, the sanction of Government was necessary. Among the many subjects which these days of revolution and reform had brought forward that of prison discipline was one, and a proposal of the two young men, to visit and report on the prisons of America, was favourably received by the Minister of the Interior; and they were soon on their way to the United States, with all the advantage of official position and a public mission. "It has often been said," adds M. de Beaumont, "that this mission was the cause of Tocqueville's journey. The truth is it was not the *cause* but the *means*. The real and predetermined object of the journey was, the study "of the institutions and manners of America."

Thus at the early age of twenty-five had Tocqueville adopted those opinions which formed the settled convictions of his life and round which all his observations on existing societies, and all his studies of past history, naturally grouped themselves; and he now entered upon that course of mingled travel and literary research which in three short years, one of travel and two of study, placed him in the highest rank of the thinkers of his time and of the literature of his country. "The tendency of society towards democracy and equality was ever before him. In his own country, on the continent of Europe, in England, in the events passing before his eyes, in every page of the history of every Christian country for the last seven hundred years, he saw one constant irresistible movement towards equality. He has since described his book as composed under the influence of a sort of religious dread produced in his mind by the view of that irresistible revolution which, for so many ages, had been marching through every obstacle and which we now see advancing through the ruins which it has made." That in his own country this was a march towards military despotism he was fully persuaded. But was it necessarily so? If there was a country in which equality and liberty co-existed, what were the peculiar institutions of that country to which liberty owed its security. These strong feelings gave an earnestness to his observations and unity to his subject which combined with accuracy of thought and charm of style ensured to the product of his labours immediate and world-wide popularity.

To state what were the answers which the New World yielded to his enquiries would be to analyse the "Democracy in America." This we cannot here attempt. Suffice it to say that in the "decentralization" of its government he saw the safeguard of Ameri-

can liberty ; and in the following passage he summed up the practical conclusion of his studies. "Christian nations appear to me to offer in our day a fearful spectacle. The movement which is hurrying them on is already too powerful to be arrested, but it is not yet so rapid that they need despair of guiding it. Their lot is in their own hands—a short time and it will have escaped from them.

"To instruct the democracy, to re-animate, if this be possible, its religious faith ; to purify its morals ; to regulate its movements ; to substitute, little by little, a knowledge of public business for its present want of experience, a knowledge of its true interests for its present blind instincts ; to adapt its government to time and place ; to modify it according to circumstances and men ; such is the first of the duties devolving in our day on those who direct society." (Introduction, p. 9.)

The period during which he was employed on the composition of his work is described by his biographer as having been the happiest of Tocqueville's life. On their return from America the first duty of the two friends was to lay before the Government and the public the result of their official mission, which had been ably and carefully executed. This was done by a report to the minister, and the publication of a volume.—"On the penitentiary system of the United States and on its application in France." But an unexpected circumstance freed Tocqueville from the duties of office and placed his time entirely at his own disposal. His friend M. Beaumont, having declined to plead in a matter in which the part taken by the minister appeared to him in a dishonourable light, had been dismissed from office. Tocqueville, who agreed in the opinion and sentiments of his friend, considered it his duty also to resign, and did so in the following words :—

"M. le Procureur-Général,

"Being at this moment at Toulon where I am engaged in the examination of the 'Bagne' and other prisons of this town, it is only to-day that I have learnt by the '*Moniteur*' of the 10th May, the rigorous, and I must be bold to say the supremely unjust, measure which the Keeper of the Seals has adopted towards M. G. de Beaumont.

"Attached for a long time past by intimate friendship to one who has thus met with dismissal, whose principles I share and whose conduct I approve, I consider it my duty voluntarily to share his lot, and to quit a position in which neither past services nor conscientiousness form any safeguard from undeserved disgrace.

"I have therefore the honour to request you, M. le Procureur Général, to submit to Mr. Keeper of the Seals my resignation of the office of 'Juge Suppléant' at the Tribunal of Versailles."

Tocqueville was thus free to give his whole time and heart to his work. The picture of these two happy years is pleasingly painted by M. Beaumont. Free from official cares, in easy circumstances, happy in a virtuous attachment to one who was to be the companion of his future life, Tocqueville was able to apply his mind, without one distracting anxiety, to the development of those thoughts which had already become fixed convictions. A letter written to his father, on the eve of his departure from America, gives us a vivid impression of the aspirations and fears of the young author modestly conscious of power, on the eve of becoming celebrated.

"This letter, my dear father, will probably be the last that I shall write to you from America. Praise be to God, we hope to embark from New York on the 10th or 20th February, and thirty days being the average length of the passage, we shall arrive in France on the 10th or 20th March.

"At this moment I am turning over many thoughts on America. Most of them are still in my head; a considerable number are already sketched on paper in the first germ and without arrangement, or are contained in conversations which I reduced to writing on returning home in the evening. All these preparatives you shall see; you will find nothing interesting in itself, but you will judge whether anything can be drawn from them. During the last six weeks of our journey, while my body has been more fatigued, and my mind more at rest, than they have been for long past, I have thought much of what might be written on America. To attempt to present a complete picture of the Union would be an undertaking utterly impracticable for one who has passed but a single year in this vast country. I think, besides, that such a work would be quite as tiresome as instructive. One might on the other hand, by selecting one's materials, only offer those subjects which have more or less connexion with our own social condition and politics. A work on this plan might have, at the same time, a permanent and temporary interest. Such is the frame. But shall I ever have the time, and shall I have the ability, necessary for filling it up? There is the question. There is besides one consideration which I have constantly before my mind. Either I will write nothing or I will write what I think; and all truth is not fit to be told. Within two months, I hope, at latest we may talk over all this at our leisure." (*Nouvelle Correspondence*, vol. VII., page 211.)

In January 1835 the two first volumes of the *Democracy in America* were published, and at once established the reputation of Alexis de Tocqueville. In France, in America, in England, the work was received with unbounded applause. The American

saw the institutions of his country analysed with masterly skill and made clearer, even to him, than they had ever before been. As the calm opinion of a foreigner, the thoughts of Tocqueville were received in America with the same pleasure as those of Montesquieu and Delolme had been received by the English, when they analysed, and held up to the admiration of the continent, the safeguards of the British Constitution. In the decentralization of municipalities they were taught to see the birth-place and the stronghold of liberty; to see "local liberties established beyond the range of the dangers which menace the great political liberty, in such wise that in the event of the fall of this, the others would not perish with it." In England the work became immediately and extensively popular. The evidence of an impartial witness as to the working of English institutions, modified to suit a republican form of government, could not fail to be of deep interest; and it was quickly seen that the work of the young author of twenty-nine was to take its place among the standard works of literature.

The publication of these volumes was shortly followed by the marriage of Tocqueville to Miss Mottley, an English lady; a marriage of pure disinterested affection, which secured, for the twenty-five remaining years of his life, a companion who appreciated his genius, rejoiced in his success, and shared his anxieties and his trials.

The preparation of the two concluding volumes of the *Democracy* occupied a period of five years; a fact which may be easily accounted for by the very splendour of his first success. To surpass, rather than fall short of, what had already been attained was a natural desire. And what was wanting in the freshness of a first untrammelled effort must be compensated by additional perfection in thought and style. M. Beaumont has observed, in another place, that so great was Tocqueville's diligence and so scrupulous his care, that to publish a single volume he wrote ten. It may be said here that to publish these two last volumes of his *Democracy* he read hundreds. To supply the deficiencies of his early study, the great moralists and historians of ancient and modern days were greedily devoured, and he described himself to one of his friends as experiencing the same pleasure, in the perusal of these great masters of thought, as Marshal Soult felt in studying geography after he had become Minister of Foreign Affairs.

But other circumstances tended also to retard the completion of these volumes. In 1836 Tocqueville succeeded to the family chateau of Tocqueville in Normandy, and with it to the interests, both agricultural and political, of a country gentleman, in a part of France where these duties nearly resemble the functions discharged by the resident gentry of our own country. The calls

of the petty magistracy, and the interruptions of contested elections, mingled with the studies of the philosopher; and the publication of the latter portion of the *Democracy* in 1840 was preceded by Tocqueville's return to the Chamber of Deputies as representative of the arrondissement of Volognes in the department of La Manche.

With the publication of his third and fourth volumes Tocqueville's literary career closed for a period of fifteen years.

These fifteen years were passed in political life. M. Beaumont has marked with much discrimination the qualifications and disqualifications of his friend for this new sphere. In perusing it we are forcibly struck by the similarity of Tocqueville's position, in the Representative Chamber of France, with that of our own Sir James Macintosh in the House of Commons. The following extracts will show in what the resemblance consists:—

"Tocqueville did not, it must be admitted, on his first appearance in politics, take his place in the highest rank as he had done from the first in literature: and for this reason, that although endowed with the chief qualifications that go to form the statesman, he was wanting in some of the characteristics which make a great orator, and, under parliamentary government, it is impossible to be the one without being the other. He spoke with ease, with much elegance, but his voice was sometimes wanting in power, arising from physical weakness of condition. The strifes of the tribune require, on the part of the orator, as much vigour and *sang froid* as are required from the soldier and general combined, for in public assemblies the speaker is, at once, general and soldier, has both to fight and to direct. Such contests were beyond the strength of Tocqueville, who never engaged in them without his health being shaken. For him the effort was too great to be often attempted. The consequence was that he mounted the tribune too seldom to become master of it.

"Another cause prejudicial to Tocqueville as an orator was the habit which his mind had formed in writing. It is possible no doubt to cite some instances of great writers who afterwards became great orators, but it is not less true as a general rule, that to write a book is a bad preparation for speaking well in public and on the spur of the moment. Almost all the great merits of a book are defects in a speech. Tocqueville brought with him to the Chamber the habits and methods of a writer, in his eyes a speech was too much a work of art, instead of being only a means of action. For a thought to be worthy to be carried to the tribune, it must, in his opinion, be not only true, but there was another consideration, it must be new. He had an insurmountable repugnance to common-

"places—an admirable feeling for one who is writing a book, but
"the most destructive of all to an orator, speaking in large
"assemblies where the commonplace is the chief favourite.

"Tocqueville had, moreover, in his literary practice and even
"in the study which he made of the art of writing contracted
"another habit, always good for the author but often prejudicial
"to the orator; that of never saying a word more than was
"necessary to give expression to his thought and to make it
"intelligible to the mind of every person endowed with ordinary
"ability. The orator is governed by quite a different law, that
"of adapting the length of his discourse to the impression made
"on his audience, of following up those impressions step by step,
"of stopping the development of his thought the moment it ap-
"pears to be understood, or of continuing it under a new form
"when he finds it has not been well taken in."

• M. Beaumont further observes that during the greater portion
of his parliamentary career, from 1839 to 1848, Tocqueville was
placed in the position least suited to his peculiar qualifications.
Admirably adapted to speak with dignified and winning authority
in office, he had too little of the tribune or the agitator to qualify
him for opposition. For government he was eminently qualified.
"Tocqueville," says his biographer, "was eminently practical,
"to the great surprise if not to the great chagrin of those who
"will have it that the man who is pre-eminent in thought must
"be inferior in action. He possessed the two great qualities of the
"politician:—the first, that clear view which penetrates the
"future, discerns beforehand the way to be followed, and the rocks to
"be avoided, sees farther and ahead of others—a quality valuable
"not only to the member of Government, but to every leader of
"a party; the second, the knowledge of men. No one knew
"better than he, how to attach them to him and to make use of
"them; to discern their qualifications and their defects; to pro-
"fit by the one and the other; to require from all the service for
"which they were best adapted and, when that service had been
"rendered, to have them pleased with him, and with themselves.
"Very open and very discreet, never underhand, never saying
"anything but what he wished to say, just so much as he wished,
"and when he wished, and saying it with a grace which gave a
"high value to his every word, Tocqueville was in short evidently
"one of those men eminent in mind, in talents, and in character,
"who under a representative government and in settled times
"are destined to take a leading part in the affairs of their country.
"But the whole of his parliamentary life was passed in unsettled
"times and in opposition."

Tocqueville's fame therefore as a member of the legislature,
like that of the great and virtuous man to whom we have compared

him, rests on the part which he took in promoting measures for the benefit of humanity, especially in regard to prison discipline and slavery, and on some speeches which, though coldly received in debate, are read with pleasure and admiration in the closet.

One of his public services during this period requires now to be specially noted. In 1846 Tocqueville was nominated President of a Committee of the Chamber appointed to report upon the affairs of Africa, and on him devolved the duty of drawing up the report of the Commission. To make himself master of the subject he had twice visited Algeria, in 1841 and 1845, and it appears to have been at this time that his thoughts were directed to the kindred subject of the British power in India. The report, which is one of the most valuable of the author's productions, bears evident traces of this study, and proves with what liberality and candour the author would have reviewed our institutions had the work been completed which he proposed to write, and, as we have seen, had actually begun.

The Revolution, which Tocqueville saw ever in progress, overthrew the Government in 1848, and to his deep grief destroyed the last hope of the establishment of constitutional monarchy in France. But as long as liberty survived Tocqueville clung to it, and gave in his adhesion to the Republic as the only means of saving the country from anarchy. He even held for a short period in 1849 the portfolio of Foreign Affairs, under the Presidency of Cavaignac; and during his brief tenure of office was able to afford proof of the highest capacity for adjusting the affairs of nations, and for maintaining the dignity of his own country. In October of that year he quitted office, but still clung to his seat in the Chamber so long as any hope of a constitutional government remained. In December 1851 he hastened from the charms of climate and society at Sorrento to share the dangers of his colleagues, and was in his place in the Chamber when the *coup d'état* put an end to its existence and to his political life. He was arrested with 200 of his colleagues and confined in the Chateau de Vincennes from which he retired into private life.

Debarred from the active service of his country Tocqueville now sought a distraction from the grief which the state of public affairs inspired, in a return to the literary pursuits of his early years; and naturally selected a subject closely connected with the anxious thoughts which occupied his mind as to the future destinies of France; that subject was the history of the Empire; or rather he proposed not so much to write a history of the Empire as "to point out and render intelligible the cause, the character, and the bearing of the great events which form the chief link in the chain of that period; the facts being little more than a solid and continuous foundation on which to rest the ideas

"which were floating in his mind, not only on that epoch, but on that which preceded and that which followed it, on the character of the period and of the extraordinary man who established it, and on the direction by him given to the movement of the French Revolution, to the fate of the nation, and to the destiny of Europe."

To this task Tocqueville applied himself with his accustomed diligence. To discover the causes of the Revolution in the previous social history of France, was the first portion of his task, and five years of labour produced a volume published in 1856 under the name of "*L'Ancien Régime et la Revolution*," a fragment which we believe will be considered the masterpiece of its author.

M. Beaumont has justly observed that "if it is true that a literary life is a bad preparation for politics, it is not less true that political life is an excellent preparation for the composition of a book, especially of a work in which the study of contemporary facts is blended with history and in which the experience of the statesman is as much required as the skill of the writer." The work was received with unbounded applause, nor could it fail to be a source of wonder as it was a crowning proof of the genius of the author, that on a subject apparently so exhausted so much could be written that was new, and at once admitted to be true.

Tocqueville was now at the summit of his fame. His literary celebrity and his frequent travels had brought him into connexion with most of the eminent men of Europe, and especially of our own country. His spotless character and engaging manners had won the regard of all; and in 1857 when he was returning, after a short visit to England, to his chateau near Cherbourg, and the First Lord of the Admiralty placed a steamer of the Royal Navy at his disposal, the unusual honour was felt to have been fittingly and gracefully conferred; so high was the esteem in which the eminent foreigner was held.

The following two years were passed by Tocqueville at the ancestral chateau from which his name was taken, one of those ancient buildings which survive in France to mark by their dilapidation how completely the state of society under which they were constructed has passed away. We do not know whether others have been as much struck as we have been by one effect which the law of equal inheritance of landed property has produced in France, we mean the entire absence of what in England is called "country life," the absence of any resident gentry among the agricultural population. Tocqueville has himself assigned as one of the most potent causes of the ferocity evinced by the peasantry of France during the Revolution, which was especially directed against the owners of the land, that

centralization which had gradually deprived the landed gentry of all local authority and therefore of all power and with it of all responsibility for local improvement. To the peasant therefore the landlord was known only as the collector of the rents of the land, and of those feudal imposts more galling still which landlords continued to levy, when the feudal protection in which they had originated had passed away. If this effect of a despotic government tended to empty the chateaux of the ancient nobles, and to draw their owners to the capital and the court, the law of equal inheritance has effectually prevented any modern country houses from springing up in their place. It is obvious that if one of the moneyed class should purchase land and build a house proportional to its extent, in the next generation the house would be disproportioned to the means of any single member of the family, and in two or three generations would probably stand deserted on one of those plots into which the soil of France is divided. It is most probably for this reason that after traversing France three times from one end to the other we could not remember to have seen a single country house in the course of construction. Suburban villas were springing up in abundance round all the towns, but all the country houses, properly so called, showed signs of dilapidation and decay. We remember too to have observed in driving from the Channel to the Pyrenees, before the days of railroads, hardly to have met a gentleman's carriage beyond the limits of the towns. The land-holder of France now resides in the town, and, where the metayer system prevails, only when the tenant has reaped his crop and placed it in heaps in the field, issues forth to select his half of the heaps.

The family of Tocqueville appear to have clung with fond tenacity to the ancestral home and local interests; and although Alexis was youngest of three brothers an arrangement dictated by family affection had, on the death of their mother, rendered him the possessor of the chateau and manor of Tocqueville. The chateau is described as "situated on the coast of Normandy, "in a beautiful and fertile country, commanding a view of the "sea and of the fort of Cherbourg, but much dilapidated—full of "recollections and ruins." No words can describe so well as Tocqueville's own the life which he led in this seclusion.

In a letter to his nephew, Baron Hubert de Tocqueville, he writes: "My mornings are devoted to study and my days are passed "in the fields superintending the workmen. We have at present "in handsome large works which we are pressing on as fast as "we can, to render our exterior much what we should be. When "this is done we shall undertake some small works only; for we "are not of the class of those idlers who can only bear the country "on condition of having a multitude of work-people and hav-
no

'sooner thoroughly established themselves than they weary of it. I think you will find Tocqueville much changed for the better when you return there, and this I hope may be in the present year. For the first time in the twenty years that I have lived in this country I have endeavoured in some degree to arrange all the old papers which are crammed here into what is called the "Chartrier" (Charterhouse). A complete examination of these would have taken more time than I had at my disposal, but the little that I have seen of these family documents has interested me greatly. I have come across the line of our fathers for nearly four hundred years, finding them always at Tocqueville, and their history mingled with that of all the population around me. There is a peculiar charm thus to tread the soil where our ancestors have dwelt, and to live amidst a people all of whose antecedents are mingled with our own. I await your coming to complete these studies which have interest only for ourselves, but for ourselves have a very great interest. I have had the curiosity too to glance over the old records of the baptisms and marriages of the parish; they exist in part up to the sixteenth century. I observed, while reading them, that for three hundred years we acted as godfathers to a large number of the inhabitants of the village; a new proof of those mild and fraternal connexions which in those times still existed between the upper and lower classes, connexions exchanged in so many places for feelings of jealousy, of defiance, and often of hatred."

We have said above that Tocqueville's method of composition was slow and laborious, but this was rather the consequence of the nature of his subject, and of the conscientious care with which it was worked out, than to any want of rapidity of thought or easy flow of diction. This is evinced by the extent of his familiar correspondence in which he loved to pour out the feelings of a warm and genial nature, and to communicate his thoughts on the passing events of the day. His correspondents both in France and England were numerous and included many of the illustrious names of both countries. While, therefore, in his country seclusion he diligently continued his labours on his great work, the current events were carefully watched and excited as lively an interest in the chateau of Normandy as in the busy world of literature and politics. The two years at which we have now arrived added largely to the materials for a second volume of his work, but only a few chapters to the work itself; but they added largely to the volumes of the correspondence.

But Tocqueville was now to be torn from both the home and the pursuits which he so much loved. Always of a frail constitution, his physical frame had several times nearly succumbed under the demands which his ardent mind had made upon it. But up

to the present time no symptoms of consumption had ever shown themselves. In June 1858, however, a spitting of blood gave alarming proof of active disease. A retreat from the bleak air of Normandy was urged upon him by his medical advisers, and supported by the entreaties of his devoted wife. Too long he lingered; and finally only removed to Cannes in November after passing three months in preparing a supply of books, manuscripts, and notes for the continuance of his work.

The soft air of the south, its sunny sky and bright vegetation inspired the sanguine mind of Tocqueville with hopes and anticipations which to the friends around him were only too plainly illusory. The delay had proved disastrous, and disease was doing its work on the frail body, while the mind seemed more vigorous and bright than ever. His work was continued with unremitting zeal, his interest in passing events was as intense as ever, and his correspondence with his numerous friends as full and free as before. But the end was at hand. "At the same time," writes M. Beaumont, "that his intellect retained all its activity, his spirit seemed to acquire a deeper calm. His disposition became daily more gentle and more tender, his character more perfect (*plus uni*), his thoughts more religious and more resigned." On the 16th April 1859, in the full possession of his intellectual powers, a believing and trusting Christian, at the age of fifty-four years, Alexis de Tocqueville passed away.

Such is a brief sketch of M. Beaumont's memoir, written, it appears to us, with admirable taste though with all the warmth of admiring affection. The publication of two volumes of additional letters and fragments has completed, in nine volumes, all the writings of Tocqueville that are destined to see the light till the present generation shall have passed away. We have endeavoured in the passages selected from the memoir to convey a just idea of the character of this great man. And we propose in a future article to collect from his writings those passages which bear upon the government of our Indian Empire. If they induce any of our readers, who have not already done so, to acquaint themselves with this writer, we shall have pointed out to them an admirable example for imitation in active life, and an invaluable model of literary style.

We have, in the above pages, compared the subject of this memoir to two great men of our own country; and we shall close it by saying, that if we were asked to point out three biographies, which we should most strongly recommend to the attention of those preparing for an Indian official career, we should name those of Sir James Macintosh, Francis Horner, and Alexis de Tocqueville.

ART. II.—THE TÁJ.

A Translation from the Persian.

IN the name of the bountiful and merciful God.
A very brief epitome regarding Banu Begam (usually addressed as Muntáz-i-Mahall, *i.e.*, the chosen of the Seraglio) and well-known as Táj-Bibi (*i.e.*, Crown Lady) the wife of the conqueror Sháh Jahán, (*i.e.*, King of the World) and the daughter of Nawáb Asaf Khán, Minister of State, also the grandchild of Nawáb Itimád-ud-Daulah. Also the names of the artisans and description of the various stones used—also the monthly salaries of the individuals employed in erecting the magnificent Mausoleum (*i.e.*, the Táj) at Agra.

It is related that the King Sháh Jahán (the conqueror) had four sons and four daughters. The first son was named Dara Shukoh (or the King of Dignity), the second Sháh Shujá (or the valiant King), the third Muhammad Moráb Bakhsh, the fourth Aurangzib Alamgir (or the Adorner and Conqueror of the World). Sháh Jahán's daughters were as follows:—The first was named Anjuman-arie Begam (*i.e.*, the Queen Adorner of assemblies), the second Geetee-arie Begam (*i.e.*, the Queen Adorner of the World), the third Jahán-arie Begam (*i.e.*, the Adorner of the world Queen), the fourth Dahr-arie Begam (*i.e.*, the Adorner of the world Queen).

It is recorded that just previous to the birth of Dahr-arie, this infant cried when yet in her mother's womb. Immediately on hearing the infant cry Muntáz-i-Mahall, the mother, entirely despaired of life and at once summoned Sháh Jahán to her side and weeping bitterly, said :

“The time for us to be parted and say farewell is to-day.

“Pain and separation are, to-day, coupled with our destiny.

“Oh, these eyes have seen a lovely friend but a short time.

“Weep tears of blood, for *to-day* is the day of our separation.

“It is a fact, well known, that when an infant cries in the womb, the mother never survives. As it is my destiny, now immediately to travel from this transitory world to the immortal country, pray, oh King, pardon all my short-comings or faults. My departure is close at hand.”

When Sháh Jahán, the King and conqueror, heard these melancholy words relative to her departure and so full of sadness, he was so overcome from his excessive love and affection that he cried aloud in the anguish of his heart, and hugs

tears like rain-drops flowed from his eyes. Alas! how can the narrator explain the degree of his Majesty's grief? It simply baffles all description. Alas! alas! is all that can be said.

The excellent and beloved Banu Begam after weeping excessively again said, "Oh King, during the period of my soul's captivity "on this earth I have long been the partner of your sorrows, and "now that God Almighty has destined you to be a King, and has "bestowed upon you the sovereignty of the world, I leave this "world with all the more regret. For this reason I have two "wishes which I trust you will approve of and carry out."

The King of the World then questioned the Queen as regards those wishes. The Queen said, "God Almighty has given you "four sons and four daughters by me. These are amply sufficient to "establish *our* race or lineage. God forbid that you should have any "other children by any of the other queens of the Seraglio, only to "cause strife and enmity with our children. My second wish is "that you should build over me such a rare, chaste, and lovely "mausoleum as shall be considered unique." With all his heart the King promised to fulfil her wishes. When Dahr-arie Begam was born she brought her mother's heart away in her closed hand, and the mother instantly died and joined the assemblies of the beauties of Paradise.

Verses.

No one, in this world, is immortal.

No one can snatch his life out of death's grasp.

Deceitful fate never performs her seeming promises.

She ever *withdraws* them at an *opportunity*.

How beautifully has that sapient man (*i.e.*, Sâdây) (who amassed a mine of wealth consisting of Wisdom's Pearls) expressed himself:—

"The world, oh brother, never remains with any of us.

"It is sufficient therefore to place your reliance *only* on *its* "

Creator (*i.e.*, of the world.)

Up to a period of about (six) months after the death of the Queen the body was deposited, by the Chaulk, in an unoccupied piece of ground, *i.e.*, not in the present Mausoleum; and plans on paper were brought and presented for inspection by artists of repute. When one was finally approved of, a model was first prepared in wood; and afterwards this chaste Mausoleum was built of rare and precious stones, and the entire edifice was adorned and completed in seventeen years.

Verses.

When Muntâz-i-Mahall left this world, the Virgins of Paradise opened the gate to admit her instantly.

On account of the date of her death the angels said, "Paradise be ever the abode of Mumtāz-i-Mahall.*

The following is from the writings of Shahāb-ud-dīn Muḥammad II., i.e., the invincible Shāh Jahān :—

Verses.

Holy and admirable tomb, containing the "Bilkris"† of the world, which has been made the cradle of *the* Lady of the Universe.

A brilliant abode resembling the Garden of Paradise.

The walls and the doors adorned with gems, and the fresh breezes, pure as jewels of the first water.

In this pure spot and magnificent mansion, the "clouds of mercy" exude their moisture.

Prayers are here answered, it is in fact the very spot where worship meets with a favourable reception.

All the attendants (angels) are renowned throughout the world for their hospitality.

The "roses of pardon" bloom throughout the gardens, the perfume of which intoxicates the brains of the pure.

The rose-buds smile but only under a veil.

The only clouds that drop their moisture are 'Clouds of Mercy.' If a sinner enters that sanctuary as an asylum he obtains pardon.

The rose-buds smile with ardent desire to be expanded, and the gentle zephyr, their assistant, does not even stir the tender grass.

Should a sinner enter this mansion, he will be cleansed from his sins.

&c.

&c.

&c.

Note by Translator.—I have here omitted a number of still more overdrawn similes, which are considered to be tedious to general readers.

* *N.B.*—According to the value of the Persian words, she died in the year 1040 of the Hijrah era.

† The beloved of Solomon, a very virtuous woman.

A description of the stones used in the preparation of the mosaic work and in the erection of the magnificent Mausoleum.

NAMES OF STONES.		FROM WHENCE RECEIVED.	QUANTITY.
			Mounds.
Cornelian	...	Baghdad	910
Ditto	...	Arabia Felix (Yemen)	240
Turquoise	...	Grand Thibet	440
Lapis Lazuli	...	Ceylon	280
Coral	...	The ocean	110
Agate & Onyx	...	South of India	540
Porcelain	...	Canara	Beyond calculation.
Lahsmia	...	Nile	915
A false stone like the Ruby	...	Ganges	245
Gold stone	...	From the mountains	970
Pie-Zahur	...	Kumám	1,010
Gwalior stone	...	Gwalior	Beyond calculation.
The "Rare-stone"	...	Sírat	5,010
Black stone	...	Jeherí	845
Opal	...	Ditto	45
Alabaster	...	Makráná	Beyond calculation.
Red or Blood-stone.	...	Various places	45
Agate	...	Khamach	45
Sung-Nakhud	...	...	225

The weight of the Stones by measurement per cubic yard.

	Per cubic yard	Mounds.
Marble	...	40
Porcelain	...	79
Black-stone	...	48
Jasper and Agate	...	95
Red-stone	...	30
Pie Zahur	...	45
Flint	...	57
"Wonderful stone"	...	42
Crystal	...	85
Sung-"Khutoo"	...	85
Lapis Lazuli	...	312
Solomon's stone	...	24
Freckled stone	...	42
Bálf	...	35
Rose-coloured stone	...	45

Ruby 54 Ms, Emerald 97 Ms, Greenstone 125 Ms, Sapphire 145 Ms, Porphyry 174 Ms, Turquoise 857 Ms, Gwalior stone 945 Ms, Refulgent stone 75 Ms, Loadstone 77 Ms, A false stone like Ruby 175 Ms, Pétonecá 49 Ms, Cashmere Marble—

A list of the artisans employed in building the magnificent Mausoleum :—

1. A Christian, inhabitant of Rome, a rare plan-drawer and artist, on Rs. 1,000 a month.
2. Amanat Khán, inhabitant of Sheráz, writer of royal titles, on Rs. 1,000 a month.
3. Muhammad Jannaf Khán, Superintendent and Director of Masonry on Rs. 500 per month.
4. A Christian artisan, who went by the name of Muhammad Sharíf, on Rs. 500 per month.
5. Ismael Khán, "dome preparer," on Rs. 500 a month.
6. Muhammad Khán (inhabitant of Baghdad), an "elegant writer," on Rs. 900 a month.
7. Mohan Lall, "mosaic worker," Rs. 500.
8. Manháwar Lall, inhabitant of Láhor, on Rs. 500 a month.
- *9. Mohan Lall of Láhor, on Rs. 980 a month.
10. Khatam Khán of Láhor, "dome preparer," on Rs. 200 per month.

The entire cost of the Tāj is put down at (4) four *krors*, (11) eleven Lakhs,* and Rs. 48,826-7-6.

Translated from the Persian by

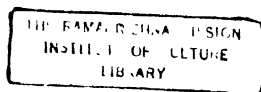
R. P. ANDERSON, *Colonel*,

MORAR, GWALIOR.

Commanding 34th Regt. N.I.

[NOTE.—The translator has left out a great deal he imagined would not interest people who do not understand Persian. Some of the similes in fact would require *endless* notes to explain the meanings, and such might possibly be tiresome to peruse! The object was merely to give a rough idea of the cost of the noble edifice the Tāj at Agra, and to describe why it was built.]

* Making a grand total of forty twenty-six rupees, seven annas and millions, eleven hundred and forty- six pie.
eight thousand, eight hundred and



ART. III.—BERKELEY AND HAMILTON AS PRESENTATIONISTS.

IT is trusted that the suggestions offered in the following pages will not be without interest for some of our readers. We wish to bring before them the question whether Hamilton has so guarded his doctrine of perception, that a well-marked line can be drawn between it and the teaching of Berkeley. Paradoxical as the inquiry may appear it obtrudes itself upon us:—Must not Hamilton's real presentationism, that it may be harmonised with other of his doctrines, be construed as a scheme of objective idealism? Can it only be saved at the expense of his consistency of thought?

We shall not consider Reid's part in the Scottish crusade against idealism and scepticism. If he held the presentative doctrine, it found a more powerful champion in Hamilton. It may be preferred, with hesitation, to regard him as holding what is erroneously styled the finer form of the representative hypothesis. We say erroneously, because the unknown external reality is, on this hypothesis, not represented, but suggested, symbolised, necessitated as an object of belief.* It is thus that Reid is regarded by Brown, and J. S. Mill; and it will be enough to refer the reader to Mill's Examination of Sir W. Hamilton's Philosophy, pp. 207-217. Stewart may be dismissed, as accepting but not amplifying, the expression of Reid, as observed by Hamilton †

Berkeley and Hamilton are both presentationists. With both the object immediately known in perception, is the object that exists without. With representationists the immediate object is subjective, like the phantasms of imagination; but irresistibly suggests to belief an unknown external reality.

Berkeley teaches that the percept exists *only* relatively as perceived; to finite mind transiently and independently, to infinite mind permanently and dependently. The relation of existence is not that of subsistence and inherence, but of conscious subject and object known.‡ External objects are, 'collections of ideas,' § a plurality of 'sensations combined, blended, or (if one may so speak) concreted together;' || in the language of Jas. Mill 'a

* Mill's Examination, p. 191.

† Lectures, vol. 2, p. 91.

‡ Berkeley's Principles of Human Knowledge, § 49.

§ *Ibid*, § 2. The reader will remem-

ber that with Locke and Berkeley an 'idea' is that of which we are immediately conscious as presented in perception, or represented in imagination.

|| *Ibid*, § 99.

cluster of sensations concreted';* in that of J. S. Mill 'groups of sensations with a background of possibilities of sensation.'† They are external 'in that they are not generated from within by the mind itself;‡ and 'when they exist in some other mind.'‡ In such groups the tangible and muscular modes, distance, size, shape, situation, when not actualised in sensation, are signified as possible by colours faint or vivid, confused or obscure, by organic feelings of straining, and adjustment of the eyes, and other sensations, the language of nature.§ Extended and resistant percepts are real, as 'more strong, lively, and distinct, than those of the imagination,' || as having 'steadiness, order and coherence,' || being 'excited in a regular train or series,' || and as being not the creatures of my will.¶ Their *esse* is *percipi*,** as the *esse* of mind is *percipere*.†† "Some truths there are so near and obvious to the mind that a man need only open his eyes to perceive them. Such I take this important one to be, *viz.*, that all the choir of heaven and furniture of the earth, in a word all those bodies which compose the mighty frame of the world, have not any subsistence without a mind, that their being is to be perceived or known; that consequently so long as they are not actually perceived by me, or do not exist in my mind or that of any other created spirit, they must either have no existence at all, or else subsist in the mind of some Eternal Spirit—it being perfectly unintelligible, and involving all the absurdity of abstraction, to attribute to any single part of them an existence independent of a spirit."‡‡

Hamilton teaches that the percept exists *both* relatively as perceived, and absolutely, independently of perception. "We may lay it down as an undisputed truth that consciousness gives, as an ultimate fact, a primitive duality; a knowledge of the non-ego in relation and contrast to the ego. The ego and non-ego are, thus, given in an original synthesis, as conjoined in the unity of knowledge, and, in an original antithesis, as opposed in the contrariety of existence. Again consciousness not only gives us a duality, but it gives its elements in equal counterpoise and independence. The ego and non-ego,—mind and matter, are not only given to-

* Analysis of the Phenomena of the Human Mind.

† Examination of Sir W. Hamilton's Philosophy, chap. 11.

‡ Principles, § 90. "Berkeley acknowledges an (a) externality in our own possible experience, past and future, as determined by natural laws, which are independent of the will of the recipient; and (b) an externality to our own conscious experience, in the contemporaneous, as well as in the

past or future, experience of other minds, finite or Divine."—Professor Fraser's note.

§ Berkeley's Essay towards a New Theory of Vision.

|| Principles § 30.

¶ *Ibid.*, 29.

** *Ibid.*, § 3.

†† *Ibid.*, § 98. Where see Professor Fraser's note.

‡‡ Berkeley's Principles, § 6.

gether, but in an absolute co-equality. The one does not precede, the other does not follow; and in their mutual relation, each is equally dependent, equally independent.*

Taking common sense, not with Hamilton as the absolute or common reason, but with Berkeley as the natural growth of unreflective opinion, we cannot allow to real presentationism any greater conformity to its dicta, than we can allow to objective idealism. The many, with Berkeley, regard the coloured object as equally real with the extended and resistant object. Hamilton's doctrine implies a difference in the mode of existence of the primary and secondary qualities of objects, the primary but not the secondary existing in the absence of a percipient; a difference repugnant to the deliverances of the ordinary or unreflective consciousness. With Berkeley the primary and secondary qualities are alike equally subjective and equally objective. "I am content," says Berkeley, "to appeal to the common sense of the world for the truth of my notion. Ask the gardener why he thinks yonder cherry-tree exists in the garden and he shall tell you, because he sees and feels it; in a word, because he perceives it by his senses. Ask him why he thinks an orange-tree not to be there, and he shall tell you because he does not perceive it. What he perceives by sense, that he terms a real being, and saith it is or exists; but that which is not perceivable, the same he saith hath no being."† We cannot allow that natural dualism is a deliverance of absolute or universal reason. That it is refused by the majority of analysts of the mind, is conclusive against it as such. To ancient Indian Speculation the conception of matter was unknown.‡ We demur against it also as a deliverance of unsophisticated belief. We question whether the many have any belief on the point, beyond an assurance of resistance to outward-passing activities. Put the question to them, and explain it, and they will doubtless reply; but in replying they already begin to philosophise. Such an appeal to common sense is an appeal from cultivated to uncultivated introspection.

The question arises: Can what, with Hamilton, is the absolute existence of objects unperceived, be other than what, with Berkeley, is their permanent and dependent existence in the infinite mind? We shall try to show that this question may fairly be asked, if we are to demand consistency between Hamilton's opinions.

* Hamilton's Lectures, vol. 1, p. 292.

† Dialogues of Hylas and Philonous, iii. Fraser's edition vol. 1, p. 329.

‡ The *prakṛiti* of the Sāṅkhyas, which has been mistranslated matter, is a first principle manifested in three primordia or emanative causes

of the object world in a state of equipoise. These three primordia which have been mistranslated qualities, for they themselves are regarded as bases of qualities and actions, are potentially what their effects are actually, viz., pleasure pain, and indifference.

The absolute existence of objects apart from perception, in the true sense of the words, is hardly consistent with Hamilton's statement that "immediate or intuitive knowledge is the knowledge of a thing as existing; consequently, in this case, knowledge and existence infer each other. On the one hand we know the object, because it exists, and, on the other, the object, the object exists, since it is known."* Can the real object known, exist at the same time as a real object unknown? This it must be if it have an existence absolute in the strict sense of the word. The object of perception must be at once a percept and something more than a percept. The object thus is partly presented, partly remains unpresented to consciousness. This hardly consists with the statement that consciousness comprehends its object within its sphere† Does Hamilton regard the object unperceived and absolute, absolute and unperceived to the infinite mind? He tells us: "All that there is now actually of existence in the universe, we conceive as having virtually existed, prior to its creation, in the Creator; and in imagining the universe to be annihilated by its author, we can only imagine this as the retraction of an outward energy into power."‡ Again, "The creation *à nihilo* means only that the universe when created, was not merely put into form; an original chaos, or complement of brute matter, having preceded a plastic energy of intelligence; but, that the universe was called into actuality from potential existence by the Divine fiat. The Divine fiat therefore was the proximate cause of the creation; and the Deity containing the cause, contained, potentially, the effect."§ Now, if this virtual or potential pre-existence was ideal, it must be ideal still, for Hamilton teaches that there is an absolute tautology between cause and effect: "Causes are only the co-efficients of the effect; an effect being nothing more than the sum or complement of all the partial causes, the concurrence of which constitutes its existence."|| If this virtual existence was not ideal, what was it? If it be said that the virtual existence here intended may be only a phenomenal existence; we reply that it will follow that the created universe is merely phenomenal, which Hamilton as a substantialist must deny. If the pre-existence of material things, and consequently according to Hamilton, their present existence, be ideal in the Divine mind; then Hamilton is at one with Berkeley, but this existence is miscalled absolute. It should be styled, as by Berkeley, independent of finite and dependent on infinite spirit. But if the objects thus pre-existent existed absolutely, then either matter is one with the Divine substance

* Lectures, vol. 2, p. 89.

† Lectures, vol. 2, p. 228.

‡ *Ibid.*, p. 406.

§ Discussions, p. 615, note.

|| Lectures, vol. 1, p. 97.

242 Berkeley and Hamilton as Presentationists.

(material pantheism), or the contradiction will emerge of substance existing in substance, a contradiction fatal in the Hamiltonian philosophy. "Whatever violates," says Hamilton, "the laws, whether of identity, of contradiction, or of excluded middle, we feel to be absolutely impossible, not only in thought but in existence. Thus we cannot attribute even to omnipotence the power of making a thing different from itself, of making a thing at once to be and not to be, of making a thing neither to be nor not to be. These three laws thus determine to us the sphere of possibility and impossibility; and this not merely in thought but in reality, not only logically but metaphysically." * "The laws of identity, contradiction, and excluded middle are not only logical, but metaphysical principles."† Again: "If the true character of objective validity be universality, the laws of logic are really of that character, for these laws constrain us, by their own authority, to regard them as universal laws not only of human thought, but of universal reason."‡ Hamilton, therefore, could not justify the contradiction by the inconceivability of the unconditioned; and we are reminded of his words: "We may never, perhaps, arrive at truth, but we can always avoid self-contradiction."§ We have thus tried to show that a charge of unconscious idealism might with some plausibility be preferred against Sir W. Hamilton. Against the theological, objective idealism, of Berkeley, two principal objections may be cited. The percept in the finite is not numerically identical with that in the infinite mind. It is not then the transitory percept of the individual, that exists permanently in the universal soul.|| Again, as was inevitable at that stage of mental analysis, attention not having been called to the muscular sensibilities till the time of Brown, "Berkeley merged the object consciousness determined by our feelings of expended energy, in the subject consciousness, determined by passive feelings and ideas."¶ We may be allowed to close our suggestions, by recalling to our readers, what we believe to be the latest and the best exposition of perception, by Professor Bain. We find it most concisely expressed in the appendix to the first volume of his work on Logic.** "The deepest

* Lectures, vol. 3, p. 98.

† *Ibid.*, vol. 3, p. 105.

‡ *Ibid.*, vol. 4, p. 65. In this ontological application of logical laws Hamilton is not followed by Mansel, who, after Kant, assures us that "contradiction is not in itself a quality of things, but a mode in which they are viewed by the mind." Limits of Religious Thought, p. 48.

§ Lectures, vol. 2, p. 85.

|| See J. S. Mill's System, vol. 2,

p. 392. It may be observed that a similar objection is brought by the Sankhyas against the phenomenalism (*vijñāna-vāda*) of certain Buddhist teachers. See Pandit Tārānātha Tarkavāchaspati's note to Sankhyatattva-Kaumudi, p. 59.

¶ Cf. Berkeley's Dialogues of Hy'as and Philonousii, p. 343, Bain's Senses and the Intellect, p. 381.

** P. 255.

of all relations is object and subject, commonly called mind and matter, the external world, and the internal world. When we pass from being engrossed with pleasure or pain to the consciousness of some extended thing, as a tree, we are affected with a marked shock of difference; we have made a transition the broadest and deepest that the mind can pass through. These typify the two ultimate or final modes of the human consciousness; they mutually constitute each other, on the principle of difference or relativity; they cannot, therefore, be resolved one into the other, or into any more fundamental experience. The contrast must be accepted as the chief division of all things, on the principle of dividing upon the maximum of difference. One portion of knowledge we term the object world, the extended world, and, less correctly, matter and the external world. The other portion we call the subject world, the unextended mind, and, less properly, the internal world. Indeed, when we talk of these two departments as dividing between them the universe of existence, we are using fictitious and unmeaning language; the ultimate universe, according to the law of relativity is a *couple*; the highest *real* grouping of things is this *two-fold* grouping, called object and subject, &c. These are the proper *summa genera*. Existence is a mere name. Object has been variously represented and analysed. Some have contended that it is an ultimate fact, given in our earliest consciousness. Others have resolved it into simpler states of the mind. The different views on this subject belong to the metaphysical and psychological question called the Theory of External Perception. We here assume that the notions expressed by object and subject can be analysed, and we give one mode of the analysis. Object means (1) what calls our muscular and bodily energies into play; (2) the uniform connection of definite feelings with definite energies, as opposed to feelings unconnected with energies; and (3) what affects all minds alike, as opposed to what varies in different minds. (1)—The greatest antithesis existing among the phenomena of our mental constitution is the antithesis between the active and the passive; the muscles (with the out-carrying nerves) being the bodily instrument for the one, the senses (with the in-bringing nerves) being the bodily instrument for the other. To this fundamental antithesis we are able to link the opposition of object and subject. Although developed by other circumstances, the contrast appears to be rooted in our greatest psychological contrast. (2)—The circumstance of our feelings being definitely changed with definite active exertions on our own part is a most notable accompaniment of our activity. When we move across a room, and feel our optical prospect definitely changing with every step, and are always going through the same definite changes with the same movements, we put this experience in contrast with

244 *Berkeley and Hamilton as Presentationists.*

feelings that fluctuate when we are perfectly still, and have no relation to our movements ; as the stages of an illness, the periodic sensations of hunger and fatigue, and the various passions and emotions. (3)—It is characteristic of the object world, that different persons are affected in the same way. Those definite changes of sense, accompanying definite movements, as in walking down a street, or in entering a room, arise in each person alike ; the other classes of feelings—hunger, fatigue, fear—run a different course in different persons.”

ART. IV.—THE MODERN HINDU DRAMA.

ACCORDING to the *Sāstras*, the Drama of the Hindús owes its invention to *Brahma*. It was breathed out by him like the *Vedas*, and communicated to Bharata and other ancient *Munis* who elaborated it into a system, and divided it into three parts. Of the three kinds, *Nāṭya*, *Nritya*, and *Nrīta*, the first constitutes the drama proper ; being defined to be gesticulation with language, and like the Greek Tragedy, “the imitation of a solemn and perfect action, of adequate importance, told in pleasing language, exhibiting the several elements of dramatic composition in its different parts, represented through the instrumentality of agents, not by narration, and purifying the affections of human nature by the influence of pity and terror.” The *Nāṭaka* represents the actions and the passions of divine, semi-divine and exalted human personages, such as Rāma, Krishna and Dushmanta. The *Nāyikās* or heroines generally are the Apsarās of the court of *Indra*, doomed by imprecations to assume for a time earthly shape and form earthly connections, maids of royal and noble families, and *vaṣyā* or courtesans of the type of a class gifted with personal and mental charms and corresponding with the *Heteræ* of the Greeks. Ratnāvalī, Debayānī, Draupadī and Basantasenā represented the different classes above-mentioned.

The Hindú Drama does not recognise the unity of place, owing to the absence of scenic decorations or dramatic surroundings ; but in point of fact the duration of an act is limited to that of representation. But the unity of action is fully observed.

The Drama is thus defined by Schlegel :—“ But of all diversions, the theatre is undoubtedly the most entertaining. We see important actions when we cannot act importantly ourselves. The highest object of human activity is man, and in the drama we see men, from motives of friendship or hostility, measure their powers with each other, influence each other as intellectual and moral beings by their thoughts, sentiments and passions, and decidedly determine their reciprocal relations. The art of the poet is to separate from the fable whatever does not essentially belong to it, whatever, in the daily necessities of real life, and the petty occupations to which they give rise, interrupts the progress of important actions, and to concentrate within a narrow space a number of events calculated to fill the minds of the hearers with attention and expectation. In this manner it affords us a renovated picture of life, a compendium of whatever is animated and interesting in human existence.”

The objects of dramatic representation are, according to Professor H. H. Wilson, thus described by Hindu critics:—They are to convey instructions through the means of amusement; and, with this view, they must affect the minds of the spectators with the sentiments which they express. These sentiments are termed by Hindus, *rasas*, tastes or flavours; and they imply both the quality as inherent in the composition and the perception of it as recognised by the reader or spectator. The *rasas*, however, are considered usually as effects, not causes; and they are said to come from the *bhāvas*, i.e., the conditions of the mind or body, which are followed by a corresponding expression in those who feel, or are supposed to feel, them, and a corresponding impression on those who behold them. When these conditions are of a permanent or durable description, and produce a lasting and general impression, which is not disturbed by the influence of collateral or contrary excitements, they are, in fact, the same with the impressions: as desire or love, as the main object of the action, is both the condition of the chief character, and the sentiment with which the spectator is filled. When the conditions are incidental and transitory, they contribute to the general impression, but are not confounded with it. They may, indeed, be contrary to it in their essence, without weakening or counteracting it; as a hero may, for public reasons, abandon his mistress without foregoing his love, and may perform acts of horror even in furtherance of his passions.

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The *bhāvas* are, therefore, divided into *sthāyī*, or lasting, and *vyabhichārī*, transitory or incidental. There are also other divisions which we shall proceed to notice.

The *sthāyī* *bhāvas*, or permanent conditions, are, according to some authorities, eight; according to others nine.

“1. *Rati* is desire for any object arising from seeing or hearing it, or having it present to the recollection.

2. *Hāsu* is laughter or mirth, distinct from the laughter of scorn.

3. *Soka* is sorrow at separation from a beloved object.

4. *Krodha* is the resentment of injurious treatment.

5. *Utsāha* is high-mindedness, or that feeling which prompts valour, munificence, or mercy.

6. *Bhaya* is the fear of reproach.

7. *Jugupsā* is aversion or disgust; the emotion which attends seeing, touching, or hearing of anything offensive.

8. *Vismaya* is the emotion produced by seeing, touching or hearing of anything surprising.

9. *Santa* is not always included in this enumeration; it implies that state of mind which contemplates all human events as transitory and insignificant.

The passions generally portrayed are love and heroism, the social organisation of the ancient Hindûs being eminently favourable to the development of both.

The Nâtaka makes no broad distinction between Tragedy and Comedy, but it is a commixture of both, blending "seriousness and sorrow" with levity and laughter. The tragic and the comic elements, according to Schlegel, bear the same relation to one another as earnestness and mirth; and every man is acquainted with both these modifications of mind from his own experience. Both bear the stamp of our common nature, but earnestness belongs more to the moral, and mirth to the sensual side.

The drama and the theatre produce each other. A dramatic work becomes most impressive when acted within the four walls of a theatre; and a theatre is a most powerful engine for the development of the drama. In ancient times there was no regular theatre erected for the purpose, but the *Sangîtsâllâ*, generally the *Uthân* or courtyard, served the purpose. The lower part was appropriated for the stage, in the upper part there were seated the King and the Râni and other distinguished male and female personages. The play opened with a prelude, in which the manager introduced the author and the actors to the audience, and informed them of the leading events and past occurrences calculated to illustrate the acts. The first act afforded a clue to the subject of the whole story which was developed in the ensuing acts. The stage itself was called *rangabhûmi* or *nepathya*. The following description of it from the *Sangîta Ratnâkara* is appropriate:—"The chamber in which dancing is to be exhibited should be spacious and elegant. It should be covered over by an awning supported by pillars, richly decorated and hung with garlands. The master of the house should take his seat in the centre on a throne; the inmates of the private apartments should be seated on his left, and persons of rank on his right. Behind both are to be seated the chief officers of the State or household, and poets, astrologers, physicians and men of learning are to be arranged in the centre. Female attendants, selected for their beauty and figure, are to be about the person of the principal, with fans and *chauris*, whilst persons carrying wands are to be stationed to keep order, and armed men, as guards, are to be placed in different directions. When all are seated, the band is to enter and perform certain airs; after which the chief dancer is to advance from behind the curtain, and after saluting the audience, scattering at the same time flowers amongst them, she will display her skill." Scenery as understood in the modern sense there was none, but thrones, weapons and carriages and *raths* with live cattle were used. We also believe that there were contrivances to represent the ingress and egress of carriages, as in the case of

Mrichchhakatika and *Vikramorvasi*, and latterly of *Rukminiharan*. One of the most noticeable features in connection with the ancient drama was not only the introduction in society of ladies of rank and title, but the representation of female characters by females; these always appeared in appropriate costumes.

With the subjugation of the Hindús by the Muhammadans, and the decadence of their learning and philosophy, the drama declined and became all but extinct. The exclusion of females from society contributed to the declension of this most interesting and instructing recreation, and subsequently caused its paralysis. At last the diffusion of English education led to the study of Sanskrit literature; and the monuments of dramatic genius were dug up and made accessible by means of Bengáli translations. The revival of the Hindú Drama dates from the year 1857. *Sakuntalá Nátaka* was performed in February of that year, at the house of the late Bábu Asutosh Dev, at Simla.

We rejoice in the resuscitation of the drama as an auspicious omen of good things to come. It has under the name of *Nátaka* flourished, as we have seen, from time immemorial. Its cultivation, and the perfection to which it was carried, affords the most conclusive evidence of a high state of civilisation. Indeed, the progress of the Drama in ancient India and the prevalence of rules regulating dramatic representation similar to those obtaining in Greece and other European countries, point to the existence of an earlier common prehistoric civilisation from which that of modern times has radiated as if from a centre.

The Modern Drama in Bengal is held not in the *sangítasáhlá* or open space, but in theatres neatly and beautifully erected at the lower end of the drawing-room, with scenic embellishments of considerable pretensions. The opening scene consists in the appearance not of the manager, but of *nat* and *natí*, who entertain the audience with dancing and introduce the actors; stating in brief the chief incidents of the play and describing the parts to be acted by them.

The modern theatre is composite, combining the stage and scenic attractions of the European with the performance of the Indian classical dramas rendered into the vernacular language.

The modern theatre like the ancient has its *vidúshaka* or privileged buffoon, the companion of the king; he generally unites great shrewdness and mother-wit, with love of creature-comforts. There is a serious drawback to the complete success of the modern drama; female characters are performed by males, as from the constitution of society, women of reputation and virtue are not available.

As *Sakuntalá* in its Bengáli dress was the first play performed in the modern theatre, and as it is the master-piece of Kálidása

we shall make no apology for giving a sketch of the circumstances under which it was written, and a *résumé* of the plot.

The age of Kálidása opens a new era in the annals of the dramatic literature of the Hindús. He has been justly called the Shakspeare of India, and his marvellous knowledge of human nature in all its varied and profound phases is almost Shakspearian. His imagination was not only a realising faculty, it could grasp the past, the present, and the future. He was a profound artist. The activity and universality of his genius pervaded every subject he touched, and clothed it in a new and fascinating garb. It became in his hands instinct with new life and redolent of poetical feeling. Kálidása is unquestionably the first of Hindú poets and may be emphatically called the genius of Ancient India. He was the most brilliant of the nine gems who adorned the court of Vikramáditya, the most puissant monarch of his age, who drove the Seythians and other barbarous races beyond the Indus, and whose dominion extended over the whole of Southern India. Of the early history and antecedents of Kálidása little or nothing is known. According to tradition he was destitute of all school learning and also common sense, inasmuch that he is said on one occasion to have tried to cut down the branch of a tree on which he was seated, overlooking the consequences of the fall. He was afterwards inspired by Saraswati, the Minerva of the Hindús; and he wrote and composed under her inspiration the two dramas of Vikramorvasi and Sakuntalá, both most remarkable for elegance and delicacy of dramatic composition. They are most polished productions, and betoken an intensity of labour bestowed on their composition. They both exhibit a deep acquaintance with the mechanism of the human heart, and a vividness of description of external objects, especially scenery. They are full of interesting and stirring incidents which succeed each other naturally; and the characters think and speak just as they might do under the circumstances in real life.

The Hindú dramatists, as observed by a recent writer in the *Cornhill Magazine*, have the highest name among all the authors whose human personality is acknowledged by Hindú piety. The chief poets of the great literary age of India, like those of the similar period in France, were unquestionably dramatists. Judged either by the quantity or by the quality of their works, they shed a lustre on their era, which has not been eclipsed by subsequent poets.

The plot of the Sakuntalá is briefly told. Dushyanta appears in the court, and orders his *pradhán* (or minister) to make preparations for a hunting excursion. The Rájá sitting in his carriage pursues a stag, the stag disappears, upon which Dushy-

anta questions his coachman about the flight of the stag. On being informed of it he hastens in another direction; and discovering the stag, wounds it with an arrow. The animal runs and takes shelter in the settlement of Vaikhānas Rishi, who remonstrates with Dushyanta about his wounding the stag. Dushyanta expresses his penitence, and receives the pardon and benediction of the Rishi. He then proceeds to the Asram of another Rishi named Kanwa, the foster-father of Sakuntalā. He there observes Sakuntalā engaged with her companions in watering the trees. He conceals himself behind a tree, and hears her praising the beauty of the *keshar* tree. Charmed with overhearing her discourse, Dushyanta tries to find out her descent. Sakuntalā is very much teased by a *bhramar* (fly) hovering about her face. The Rājā then comes forward, and asks the cause of the disturbed state of her mind. After a mutual exchange of polite attentions, they all take their seats beneath an umbrageous tree. Dushyanta informs her of his country and descent, whereupon they all retire to the Asram. The Rājā is suddenly smitten with the charms of the lovely Sakuntala, who reciprocates his love, but is prevented by her innate modesty and delicacy from giving expression to her feelings. Her reserve is at last conquered by the perseverance of the Rājā, and they are married. Then the Rājā departs to his kingdom and forgets the marriage; his obliviousness being the effect of a curse pronounced on Sakuntalā by Durvāsī Muni. The interest of the play is concentrated in the fourth act, which describes the departure of Sakuntalā from the Asram of Kanwa and her meeting with her husband. It appears that some time after the Rājā's desertion of Sakuntalā Kanwa discovered an auspicious omen which led him to infer that Dushyanta would soon recover his memory. On the eve of her departure, Sakuntalā thus laments her separation from her beloved trees and pet animals:—

SAKUNTALA.

My beloved jasmine, most brilliant of climbing plants, how sweet it is to see thee cling thus fondly to thy husband, the mango tree; yet, prithee, turn thy twining arms for a moment in this direction to embrace thy sister; she is going far away, and may never see thee again.

PRIYAMVADA.

You are not the only one, dearest, to feel the bitterness of parting. As the time of separation approaches, the whole grove seems to share your anguish.

In sorrow for thy loss the herd of deer
Forget to browse; the peacock on the lawn
Ceases its dance; the very trees around us
Shed their pale leaves, like tears, upon the ground.

KANWA.

Daughter, the cherished purpose of my heart
Has ever been to wed thee to a spouse
That should be worthy of thee ; such a spouse
Hast thou thyself, by thine own merits, won.
To him thou goest, and about his neck
Soon shalt thou cling confidingly, as now
Thy favourite jasmine twines its loving arms
Around the sturdy mango. Leave thou it
To its protector—e'en as I consign
Thee to thy lord, and henceforth from my mind
Banish all anxious thought on thy behalf

Listen, then, my daughter. When thou reachest thy husband's
palace, and art admitted into his family,

Honour thy betters ; ever be respectful
To those above thee ; and should others share
Thy husband's love, ne'er yield thyself a prey
To jealousy ; but ever be a friend,—
A loving friend, to those who rival thee
In his affections. Should thy wedded lord
Treat thee with harshness, thou must never be
Harsh in return, but patient and submissive.
Be to thy menials courteous, and to all
Placed under thee, considerate and kind ;
Be never self-indulgent, but avoid
Excess in pleasure ; and when fortune smiles,
Be not puffed up. Thus to thy husband's house
Wilt thou a blessing prove, and not a curse.

On the arrival of Sakuntalá at the palace of her husband she is repudiated by him. Dushyanta forgets his marriage owing to the mysterious disappearance of the marriage-ring ; but on the subsequent recovery of it by a fisherman, he recovers his recollection, and experiences unspeakable agony in missing his wife. The drama concludes with the return of Sakuntalá and the happy reunion of the hero and heroine.

Of Sakuntalá and the Hindú Drama, Schlegel makes the following remarks :—"And to go to the other extreme, among the Indians, the people from whom perhaps all the cultivation of the human race has been derived, plays were known long before they could have experienced any foreign influence. It has lately been made known to Europe, that they have a rich dramatic literature, which ascends back for more than two thousand years. The only specimen of their plays (nataks) hitherto known to us is the delightful Sakootollah which, notwithstanding the colouring of a foreign climate, bears in its general structure such a striking

resemblance to our romantic drama, that we might be inclined to suspect that we owe this resemblance to the predilection for Shakspeare entertained by Jones the English translator, if his fidelity were not confirmed by other learned Orientalists. In the golden times of India, the representation of this natak served to delight the splendid imperial court of Delhi; but it would appear that, from the misery of numberless oppressions, the dramatic art in that country is now entirely at an end."

Monier Williams, author of the second translation of Sakuntalá, says, "The English reader remembering that the author of the Sakuntalá lived in the century preceding the Christian era, will at least be inclined to wonder at the analogies which it offers to our own dramatic composition of fifteen or sixteen centuries later. The dexterity with which the plot is arranged and conducted, the ingenuity with which the incidents are connected, the skill with which the characters are delineated and contrasted with each other, the boldness and felicity of the diction, would scarcely be unworthy of the great dramatists of modern times."

Goethe has thus summed up the merits of Sakuntalá :—

"Wouldst thou the young year's blossoms and the
fruits of its decline,

And all by which the soul is charmed, enraptured, feasted, fed?
Wouldst thou the earth and heaven itself in one sole
namic combine?

I name thee, O Sakoontola; and all at once is said."

The performance of Sakuntalá at Simla was, however, a failure. This is not to be wondered at; for Sakuntalá, being a master-piece of dramatic genius, requires versatile and consummate talent for its representation, rarely to be met with in this country.

Among those who have contributed to the revival of the drama, a conspicuous place must be assigned to Rájá Jatindra Mohan Tagore, the late Rájá Pratáp Chandra Singh, and the late Bábu Kálíprasanna Singh.

In the month of April 1857, *Vení Sanhára* Nátaka was performed at the house of the late Bábu Kálíprasanna Singh of Jorasanko. The *Vení Sanhára* is founded on a story of a *Saróparya* of the Mahábhárata: Yudhishtira, the eldest of the Pándava brothers, having staked and lost his all in gambling, his wife Drupadī was dragged by the braid of her hair by Duhsāsana, brother of Durdjohana, and disgraced in the open Shava or assembly. The revenge wreaked by the Pándavas upon the Kauravas forms the subject-matter of the play. Bhíma the second brother of Yudhishtira thus exclaims :—

"Shall I not grind the Kauravas to dust,
Nor drink the blood of arrogant Duhsāsana
Shall not my mace upon the breast descend

Of proud Duryodhana, and crush the wretch,
Because your monarch seeks the price of peace. ?
Draupadī advises Bhīma to be forbearing :—

Yet ere you go attend to my request
Let not my shame so far inflame your wrath,
That heedless of your lives, you headlong plunge
Into the conflict ; the chieftains of the enemy
Are neither rash nor timorous."

The resentment of Bhīma, the selfishness of Duryodhana, the meanness of Duhsāsana, the prowess of Arjuna, the pride of Karna, and the forbearance of Draupadī are graphically described. The play is distinguished by individuality of character, but very deficient in felicity of illustration and fertility of imagination. The concluding scene introduces Bhīma as the destroyer of Duryodhana : Draupadī thus revenged, her braid of hair is again bound up. It was well acted and the principal characters were admirably sustained.

In November 1857, a second and more brilliant performance, that of *Vikramorvasī*, took place at the premises and under the management of the late Bābu Kālīprasanna Singh ; the Bābu himself was one of the *dramatis personæ*. There was a large gathering of native and European gentlemen, who were unanimous in praising the performance. Among the latter, Mr., afterwards Sir, Cecil Beadon, the then Secretary to the Government of India expressed to us his unfeigned pleasure at the admirable way in which the principal characters sustained their parts. *Vikramorvasī*, another production of Kālidāsa, narrates the story of the love of Rājā Pururavā the demigod, and a nymph Urvasī. She was formerly a denizen of Swarga or the celestial regions, but having offended Mitra and Varuna, was condemned by them to become the consort of a mortal. Oblivious of her high place in heaven, and of the vocations entrusted to her, she introduced herself to the Rājā and immediately inspired him with fervent love. They were married, and they dwelt together in the forest of Chitraratha, near Alakā the capital of Kuvera, for 61 years, in undiminished conjugal felicity. Urvasī being missed in the court of Indra, was carried away there by the Devatas, Apsarasas and Gāndharvas, on the termination of the period of impregnation. The ostensible cause of her translation to heaven was the violation by her husband of two conditions, which she had exacted from him. The first condition was that the Rājā should personally take charge of her two patrons and prevent their being forcibly or fraudulently carried away. The other condition was that she was never to behold the Rājā divested of his dress. The Gandharvas having entered the sleeping chamber of the Rājā carried off the rani ; the Rājā leaped naked out of bed and in the excitement of the moment pursued the ravishers, but he had no sooner left the bed than Urvasī disappeared.

Urvasī is thus described by Professor Wilson. "She was delicately and symmetrically formed, was graceful in her gestures, and fascinating in her manners; her voice was music, her countenance was dressed in smiles, and her beauty was such as might enchant the world; no wonder, therefore, that Pururavā was at once inspired with fervent love." No wonder, also, that, when Pururavā first beheld Urvasī he exclaimed, "Well might the nymphs, who tempted Nārāyaṇa in his devotions, stand silent with shame, when they beheld her as she sprang forth to light; or rather, I would hold that she was no daughter of the ascetic at all. Say, was it the moon, the giver of brightness, who called her into being, or Kāma himself, his whole soul immersed in love, or was it the month that is richest with flowers? How, indeed, could an aged Muni, cold with continued study of the Vedas, and sense-isolated from all objects of desire, create a form so fair or heart-bewitching as hers?"

After the celebration of the marriage of Pururavā with Urvasī, the elder Rānī thus expresses herself as reconciled to it, thereby making a virtue of necessity:—

"Resplendent pair who over the night preside,
Lord of the deer-borne banneret, and thou
His favourite, Rohini—hear and attest
The sacred promise that I make my husband.
Whatever nymph attract my lord's regard
And share with him the mutual bonds of love,
I henceforth treat with kindness and complacency."

The following description of the palace, at evening, is graphic. "Sweet, indeed, over the palace falls the close of day, the peacocks sit lost in sleep, as if night herself had scattered them on their poles; the doves, as they fly to their turret-tops, are lost in the fumes of incense which escape from the windows; and the venerable old men of the seraglio are distributing the evening lamps on the altars decked with offerings of flowers."

Pururava's grief for the separation from Urvasī is vividly described. It is different from that of King Lear, but it is not less deep, intense, and heartrending. Roaming from forest to forest in quest of his beloved, he thus questions the denizens thereof, "I beseech thee, Oh lord of the peacocks! tell me if, as thou roamest through the woods, thou hast seen my own fair bride? Oh, hear me! Her face is like the moon, and her gait is as the stately flamingos; thou wilt know the signs of her, for I have told them unto thee. Oh! bright-eyed peacock with the dark blue throat! hast thou not seen the desire of my heart, whom I seek in this forest—my loved wife with the long fair eye, the worthiest object in the world? Ha! he gives me no answer, but begins to dance." The Vikramorvasī bears the impress of the

same master-mind as the Sakuntalá. The former has justly been called the twin-sister of the latter. A writer in the *Westminster Review* makes the following apposite and telling remarks.—

“Kalidasa’s genius burns brightly in both these dramas. In each we trace the same love of Nature in all her forms, whether in the grandeur of the mountain or the sweet pastoral quiet of the valley; everywhere we see the poet’s sympathy with scenery and its manifold influences on his mind. His soul flowed on through the world like a clear, still river, and its mirror took the reflection of every scene through which it passed. Few poets have felt deeper than he the depth of sympathy which lies between the human soul and the outer world which surrounds it. The hills and the woods are not stolid spectators, indifferent to our joy or our pain, but they vary their aspects to the changed aspects of the soul, and the scene which is joyous to the happy wears a gloom and sadness to the eyes of human sorrow.”

About the time of which we have been speaking, when the *Vikramorvasí* was for the first time performed before a modern Bengálí audience, Rájá Pratáp Chandra Singh, a man of enormous wealth and high position in society, having estates in seventeen districts, came forward as the patron of the Hindú Drama. His accomplished brother Iswar Chandra Singh heartily joined him in this laudable undertaking. He erected a spacious theatre in his villa at Belgachiyá and the corps of *dramatis personæ* was trained by Bábu Kesav Chandra Ganguli, who is a born actor. The first play performed in the Belgachiyá theatre in August 1858, was *Ratnávalí*, translated by Pandit Rámnáráyana. It was accompanied by a band newly organized by Khsetramohan Goswain. There was a distinguished audience present on the occasion, including Sir Frederick Halliday, the then Lieutenant-Governor of Bengal, the Judges and the Magistrates of Calcutta, and other high officials as well as non-officials. The performance was a great success.

Belgachiyá Villa, where it took place, is the villa formerly owned by Dwarkanáth Tagore, and was the *rendezvous* of almost all persons of distinction, rank and talent; the only private garden where Europeans of different classes and native gentlemen met and mixed freely and cordially. During the time of Rájá Pratáp Chandra Singh the garden was laid out as tastefully and beautifully as it had been during that of his predecessor. The *mati-jhil* meandering through the entire length of the grounds and sparkling with the *Nilumbium Speciosum*, the favourite *padma* of the Hindús, the lawn spread in all directions and aglow with parterres of roses and xínias, the glittering marble fountain surmounted by a Cupid and spouting forth water, the summer

house floating as it were on an island and connected with the garden proper by an iron suspension-bridge; these were great attractions. The *toute ensemble* was like a fairy scene, and added considerably to the charm and *éclat* of the dramatic entertainment.

Ratnāvalī or the Necklace marks a new era in the national manners and customs of the Hindus. It is founded on the loves of Vatsa, prince of Kausāmbī, and Vāsavadattā, princess of Ujjayini, which are alluded to in the *Megha Dūtā*, and are narrated in the *Vrihat Kathā* of Soma Deva. The last is described by Professor H. H. Wilson as a writer of the same period as the drama, but he does not pretend to have invented the story; and the manner in which the tale is adverted to in the *Megha Duta*, the date of which work is unknown, but which no doubt is anterior to the *Vrihat Kathā*, seems to indicate a celebrity of some antiquity. The incidents are essentially of a domestic character, and the *dramatis personæ* are moulded in a human not in a divine or semi-divine form, as in preceding dramas. It is evidently the production of a later age, and of a different condition of Hindū society. It is said to owe its paternity to Śrī Harsha Deva, a Rājā of Kashmir and a patron of learning. The principal characters are:—

Vatsa.—The king of Kausāmbī.

Yojandharāyana.—His chief minister.

Vasantaka.—The king's confidential companion.

Basubhūti.—The ambassador of the king of Sinhala.

Bābhavya.—An envoy from Vatsa to the king of Sinhala.

Vāsavadattā.—The queen of Vatsa.

Ratnāvalī.—The princess of Sinhala.

Ratnāvalī the favourite child and only daughter of Sinhala, or Ceylon (Lankā), is consigned a bride by her father to Vatsa, and is sent to join her bridegroom in a vessel. The vessel is wrecked and she is discovered floating in the water by a merchant of Kausāmbī. Her costly necklace indicating a regal rank, this waif of the sea is rescued from a watery grave, treated with profound respect by the merchant, and consigned to the *rājbarī* of Kausāmbī, but *Vāsavadattā* discovers her rare beauty, and being afraid of her provoking the passion of the king, conceals her in a solitary apartment of the zenana. But the Rājā descries Ratnāvalī in a garden where she had accompanied her friend Susangatā. He exclaims "A most surprising damsel; truly, such another is not to be found in this world. I am confident that when she was created, Brahmā was astonished at his own performance."

The course of the Rājā's true love, after encountering many formidable difficulties, is crowned with success. The necklace of Ratnāvalī betrays her paternity to *Vikramabāhū*, the king of Sinhala, and her sisterhood to the Rānī *Vasavadatta*, who, owing

to this relationship, is reconciled to the marriage with her husband. She decorates her with her own jewels, takes her by the hand and presents her to the *rājā*, saying "Accept Ratnāvalī, my lord." The *Rājā* taking Ratnāvalī's hand replies "Who would not prize the favour of the Queen?" The parts of the king and Ratnāvalī were performed by young men who acquitted themselves most creditably in their situations, which were eminently dramatic. But the gem of the actors was *Vasantaka*, who was represented by *Bābu Kesav Chandra Gāngulī*. His ready wit, his brilliant *bon mots* and inimitable comic humour, may fairly entitle him to the praise of being the best actor in Bengal. He kept up the interest of the play most successfully, and was the life and soul of the performance.

The concluding scene introduces a magician, who exercises his art in open *darbār*, presided over by Udayana and his queen *Vāsavadattā*. *Basubhūti*, the ambassador of the king of *Sinhala*, is then announced and summoned to the presence. The magician is dismissed, but he lights up the palace with an illusory fire. The ambassador tells the tale of Ratnāvalī, *alias* *Sāgarikā*, from the time of her betrothment to Udayana to her shipwreck. In the meantime, the report of the fire is brought to Udayana and he rushes to her rescue. "The light shows me *Sāgarikā*; 'tis she, alone, without assistance."

Sag (aside).—The prince! The sight of him inspires me with the hope of life. (*aloud*) Preserve me, Sire!

Udayana.—Fear not; support one moment these investing vapours. Ha! the scarf on your bosom is on fire (*snatches it off*); your fetters impede your path, let me support you. Dearest, cling to me (*takes her in his arms*), already is the heat allayed; be of good cheer, the fire cannot harm thee, love, whose very touch abates its intensity. (*Pauses—looks round—closes his eyes, and re-opens them.*) Why, what is this! Where are the flames! They have disappeared and there stands the palace unharmed! Ha! the daughter of *Avanti's* monarch!

Udayana (to Vāsavadattā laughing).—Well, madam, it remains with you to say how we shall dispose of the sister you have acknowledged.

Vāsava.—My lord, you might as well speak out, and say 'I'll take Ratnāvalī over to me!'

Vas.—Your majesty very accurately conceives the minister's design.

Vāsava.—Come here, Ratnāvalī, appear as becomes my sister. (*Puts on her her own jewels; then takes her by the hand and presents her to Udayana*) Accept Ratnāvalī, my lord.

Udayana (taking her hand).—Who would not prize the favour of the queen?

Vāsava.—And remember, my lord, she is far away from her natural relations ; so treat her therefore that she may never have occasion to regret them."

Uday.—I shall obey.

Both Sakuntalā and Ratnāvalī show that females were not excluded from society in ancient India. Sakuntalā appears in the open darbār of Dushyanta and pleads her own cause. In the Ratnāvalī, Basubhuti, the ambassador of the king of Sinhala, and the envoy from Udayana, are summoned to the public court of Udayana and enter into an unreserved communication with Vāsavadattā and Śāgarikā. We have even earlier proof afforded in the Vaidik period of the liberty enjoyed by the Hindu females. The Rig Veda, the earliest record of Hindú thought, makes mention of ladies riding in chariots. They joined in public worship and took part at bridal processions. They are still permitted to perform their ablutions in the Bhāgirathī and other sacred rivers. There is, therefore, no doubt, that the seclusion of women originated during the Muhammadan times and in Muhammadan customs. It is also manifest that the creation and multiplication of accomplished courtesans is ascribable to the rigid exclusion of the virtuous and respectable portion of the sex in the zenana, and also to their defective education. The Hetære of the Greeks and the Vaisya of the Hindus were the creatures of an imperfect system of civilisation prevailing among both nations.

In 1859, Sarmishthā Nátaka was performed at the Belgáchiyá theatre. The principal characters of the play are as follows :—

Yayāti the chief of the Daityas, Mádhava the chief of the companions, Sukráchárýya the spiritual guide of the Daitya race, Vakásura, a Daitya, Debyání the daughter of Sukráchárýya, and Sarmishthá, the daughter of Vrishaparva, king of the Daityas.

Debyaní was the wedded wife of Yayāti, but the latter, smitten with the charms of Sarmishthá, falls in love with her and thereby incurs the jealousy of his wife, who ill-treats her favoured rival. In order to avenge herself, Sarmishthá leads Debyaní to the side of a well and throws her in. Debyaní sends word of her misfortune to her father. The indignation of Sukráchárýya knows no bounds.

He hastens to the *rājbarí* of Yayāti, and pronounces his curse, that the rájá should for ever labour under physical disability. Smarting under this terrible imprecation, Yayāti beseeches the Guru to relent ; and Debyaní having joined in the entreaty, he said that it was possible for him not to remove the imprecation, but so to modify it as to pronounce (which he there and then did), that if any of the Rájá's sons would accept the sufferings involved in the curse, his highness would be free from it. Yayāti's youngest son, Puru, consented to be the vicarious victim, and the infirmities of Yayāti were transferred to him. Sukráchárýya's anger being

pacified, Sarmishthá was married to Yayáti and the play virtually concludes with the happy union. After a sufficient time Yayáti resumed his decrepitude, and delegated his kingdom to Puru in recognition of his filial love. Puru became the founder of the Pauravas, comprising the Kaurava and the Pándava families.

In 1859 the Nátaka Málavikágnimitra or Agnimitra and Málaviká, was performed in the theatre erected by Rájá Jatindra Mohan Tagore Báhadur, at his house in Páthuriágháttá. It is not a very spacious, but a very beautifully got-up theatre, the scenes are singularly well painted, especially the drop-scene, which is ablaze with aloes and water-lilies, and is entirely oriental. The Málavikágnimitra is supposed to owe its paternity to Kálidása, the author of Sakuntalá and Vikramorvasí. But it bears internal evidence of a later age and of a different condition of society from what had prevailed in the days of Vikramáditya. Besides, it wants the fire of his genius, the wealth of his imagination, and the music of his versification. Agnimitra is the king of Vidisá, and a scion of the house of Chandra Gupta, the Sandracottus of the Greeks. The other conspicuous characters are Gotama, the confidential companion and the privileged buffoon of Agnimitra, Dháriní the principal queen, Irávatí the junior queen, and Málaviká the heroine.

The Nátaka opens with the appearance of Vakulávalí, a female attendant upon the queen at the Sangita Sálá or saloon of music, to enquire of the progress made by Málaviká, in dancing and singing. In the meantime the king having discovered the portrait of Málaviká painted by order of the queen for the *Chitra-sálá* or picture gallery, is enraptured with her beauty as imaged in canvas and longs to look at and possess the original. His wish is soon gratified. At a concert held at the palace for the trial of some musical professors, Málaviká is introduced; and she sings an *upagána* or prelude, and then executes *Chatushpada Vatsu* in the *Madhya Laya* or *andante* time, which was composed by Sarmishthá.

The business of the plot thickens, and much of the interest is concentrated in the fifth and penultimate act. The rájá Agnimitra, his senior rání Dháriní and Málaviká are seated in the Asoka tree (*Asoka-Jonesia*) when some presents arrived from the rájá of Vidarbha. Amongst the gifts are two *bandís* or female-slaves, who immediately recognise in Málavika the sister of Mádhavasena, the friend of Agnimitra, whom the armies of the latter have just liberated from the thralldom to which the Vidarbha sovereign had consigned him. It appears that Málaviká on her way through the Vindhya mountains was attacked by dacoits, but effected her escape. She then resumed her route towards Vidisá, where she was fated to pass through a period of servitude and then meet with a suitable

helpmate. The concluding act describes the celebration of an *Aswamedha*, by the *rājā* in commemoration of his victory over Vidarbha and the consequent accession of territory.

The *Aswamedha* consisted in letting loose an *aswa* or horse (with a gold-plate with the name of the performer inscribed thereon) for one entire year into foreign territories, where the owner and his army followed him ready to do battle with such chiefs as might carry away the animal and refuse on demand to tender their submission by restoring him. If the rival monarch should get the better in battle, he was entitled to retain the horse and put a stop to the *Aswamedha*. But if he should be worsted, he was compelled to restore the horse, and assist as a feudatory in the celebration of the *Aswamedha* rite. The performer of the *Aswamedha* thus succeeded in reducing to submission every chief who dared to carry away his horse, and was considered to have achieved a great feat and earned imperishable renown. The ceremony was brought to a termination by the sacrifice of the horse to the *Devatās* in the presence of the conquered chiefs and the people, and by a grand banquet at which the roasted flesh of the horse was the *pièce de résistance*.

The next play that was performed at the Páthuriágháttá theatre was *Bidyāsundara*. It is the most popular play in Bengal. It is acted in every part of this province, especially during the *Durgápújá* and other festivals. It is an episode of the *Annadá Mangal*, the great work of Bhárat Chandra Ráy, who composed it under the auspices of Mahárájá Krishna Chandra Ráy of Nadiyá. As generally acted it resembles an operatic performance, but it was dramatised by the *Rājā* Jatindra Mohan. He has revised it and eliminated all indecent allusions from it. The heroine *Bidyá*, a daughter of the house of Bardwán, being what is now called a blue-stocking, was determined to give her hand and heart to him who should win her in a literary controversy. *Sundara*, a prince of Káncchipur near Vijayanagrám, having heard of her determination, came up to Bardwán and contrived to have a private interview with *Bidyá* through the instrumentality of a *máliní* or flower-girl. He discussed with his lady-love a variety of literary subjects, and extorted from her much admiration of his intellectual superiority. The result was that *Bidyá* and *Sundara* were married in private, and used to meet very night. A subterranean path excavated between the house of the *máliní* and the apartments of *Bidyá* in the *rājbarí*, served as his passage. The remains of this *suranga* are still supposed to exist, and are pointed out as lying in the vicinity of the old *rājbarí*. In due process of time *Bidyá* became pregnant. Her interesting condition having attracted the notice of her mother she reported the fact to her husband *raja* Bírasiha Ráy, who

immediately instituted inquiries; Sundara being discovered to be the author of the intrigue, was arrested and sentenced to be capitally punished. He was rescued at the eleventh hour, and his distinguished antecedents being revealed, he was pardoned and married in due form to Bidyá. The drama is full of striking and interesting incidents; but, as originally composed by Bhárat Chandra, it was characterised neither by chastity of diction nor by purity of thought, although it exhibited a richness of fancy and fertility of imagination unsurpassed in any other Bengálí drama.

This performance took place in December 1865; and was supplemented by that of an amusing farce *Jemnakarma Temni Phala*.

Another farce entitled *Bujhla Ki Ná* was performed at the Páthuriágháttá theatre in December 1866. It was admirably acted, and elicited roars of laughter from the audience.

About this time the taste for dramatic performance began to spread. Several wealthy and middle-class men improvised theatres and got up plays. In 1866 *Sítá Banabása*, or the Exile of Sítá, a Bengálí play composed by Bábu Umes Chandra Mitra, was performed at the house of Bábu Nilamaní Mitra of Bhawánipur.

It is founded on an incident of the Rámáyana, namely, the expatriation of Sítá by her husband Ráma owing to his unreasonable suspicion of her chastity. Sítá lived during her exile in a forest as an unprotected female; a fact which affords conclusive evidence of the liberty enjoyed by Hindú women in early times. The play was accompanied by a performance of orchestral music led by Bábu Kesav Chandra Mitra, who is an accomplished instrumentalist.

In 1867 *Nava Nátaka*, or the new drama composed by Pándit Rámnaráyan, was performed at the house of Dwárákánáth Tagore. The plot is poor and destitute of interesting incidents. It depicts the evils of polygamy, and describes the miserable lot of the husband who has the misfortune to own two wives. Gabesa Bábu is the husband, and the misery of his domestic life was vividly realized. In truth, the acting was infinitely better than the writing of the play. Not only Gabesa Bábu but almost all the other actors acquitted themselves most creditably. The late Bábu Ganendranáth Tagore and his brother Bílu Gunendranáth Tagore, the grandsons of Dwárákánáth Tagore, got up this performance in their residence at Jorasanko, and the principal characters were personated by members of their family. It is a thousand pities that the untimely demise of Bábu Ganendranáth Tagore proved a death-blow to the Jorasanko theatre.

In July 1867 *Sakuntalá* was performed for the second time

in Calcutta. It took place at a house at Kánsáripára, but with no better success than at Simla.

The same year witnessed the performance of an original Bengali play, entitled *Padmavati*, composed by the late lamented Michael Madhusúdan Datta. It took place at the house of the late Bábu Jaya Chánd Mittra, at Garáhnáttá, and met with indifferent success.

Another original Bengali performance, entitled *Bidhabá Bibáha*, or the marriage of the Hindu widow, took place at the house of the late Bábu Gopál Lál Mallik, afterwards occupied by the Metropolitan College, and now razed to the ground. The subject of the drama has a social significance which cannot be misunderstood. It is an unmistakeable indication of the current of the opinion of educated Hindus in favour of widow marriage.

Sarmishthá was performed for the second time in Bengal at the Rájbari in Kuch-Bihár, a few months ago, under the auspices of Col. J. C. Haughton, the Commissioner of the division.

Returning to the Páthuriyágháttá theatre, we find that *Málatí Mádhava*, translated by Pandit Rámnaráyan, was performed there in 1869.

Málatí Mádhava is a fine specimen of Hindu dramatic literature. Although *Sringára Rasa*, or love, constitutes the predominating element of the play, yet in respect to fastidious delicacy, it may be advantageously compared, as observed by Professor Horace Hayman Wilson, with many of the dramas of modern Europe treating of the same passion. The *Sringára Rasa* is described with the truest touches of tenderness and pathos. The *Málatí Mádhava* resembles in many respects *Romeo and Juliet*. The fervour of passion, the restraint and reserve with which it is avowed, and the purity of sentiment underlying it, constitute a most pleasing and interesting picture of Hindu national life. The play is full of incidents, showing that the course of true love never runs smooth; but the *denouement* results as usual in the marriage of the lovers. The author of *Málatí Mádhava*, Bhavabhúti, is a more impassioned writer than Kálidása. His are words that breathe and thoughts that burn.

The play thus concludes with the address of Kámandatí, priestess of Budha and nurse of Málatí, to Mádhava, and the reply of the latter.

“ Kám.—

My son, what more remains ?
The happiness that was your earliest hope,
By my devotion and the skilful pains
Of my disciples, is at last ensured you.

The king and Nandana approve the suit
Of your dear friend, and hence no fear prevents
His union with his love. If yet there be
A wish ungratified, declare it—speak.

Mád. (*Bowing*)—

My happiness henceforth is perfect : all
The wish I cherish more is this, and may
Your favor, holy dame, grant it fruition.
Still may he virtuous be exempt from error,
And fast to virtue cling ; may monarchs, merciful
And firm in equity, protect the earth ;
May in due season from the labouring clouds
The fertile showers descend ; and may the people,
Blest in their friends, their kindred, and their children,
Unknowing want, live cheerful and content."

•The performance of *Málati Mádhava* was accompanied by a concert, of Hindu music. The present notation of Hindu music was for the first time introduced. Closely connected as it is with our subject, the following description of Hindu instrumental music will, we believe, interest the reader.

CATALOGUE OF MUSICAL INSTRUMENTS.

I.—*Stringed Instruments.*

- | | | |
|-----|-----|----------------------|
| No. | 1. | Víná. |
| " | 2. | Setára. |
| " | 3. | Tritautrí víná. |
| " | 4. | Kinnarí víná. |
| " | 5. | Rudra víná or Raráb. |
| " | 6. | Surada. |
| " | 7. | Sur sríngára. |
| " | 8. | Sur báhár. |
| " | 9. | Bípanchi víná. |
| " | 10. | Tamburá. |
| " | 11. | Ektará. |
| " | 12. | Svara Víná. |
| " | 13. | Sáringi |
| " | 14. | Taush. |
| " | 15. | Esrár. |
| " | 16. | A'lápa sáringi. |
| " | 17. | Surá Sá. |
| " | 18. | Sáringí. |

II.—*Pulsatile Instruments.*

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|-----|-----|--|
| No. | 19. | Dholoka. |
| " | 20. | Dhol. |
| " | 21. | Dháká (generally played on the occasion of the Charak Pújá). |

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|---------|--|--|
| No. 22. | Nágará, jil. | } These five, together with four other instruments, are played in concert, and they form the <i>Nao</i> , the grand instrumental music of Hindustán. |
| „ 23. | Do., bom. | |
| „ 24. | Dámámá. | |
| „ 25. | Khardak, jil. | |
| „ 26. | Do., bom. | |
| „ 27. | Jay dhol. | } Played together with Kánsi. |
| „ 28. | Jaga jhampa. | |
| „ 29. | Kárá. | |
| „ 30. | Nágára. | |
| „ 31. | Tásá. | |
| „ 32. | Mádal (played by the Sántáls). | |
| „ 33. | Hárák (played by up-country Káhárs or palkibearers). | |
| „ 34. | Khol. | |
| „ 35. | Dumburu (played by snake-charmers, &c.) | |
| „ 36. | Dhap. | |
| „ 36½. | Dára. | |
| „ 37. | Jháji-khanjá. | } Played by the Bairágis of Bengal. |
| „ 38. | Khanjá. | |
| „ 39. | A'nanda laharí. | |
| „ 40. | Gopí-Yantra. | |
| „ 41. | Mridanga. | |
| „ 42. | Dáyá. | } Played in concert with sáringi when dancing girls sing with setára, &c. They are also played when light songs are sung. |
| „ 43. | Tablá. | |
| „ 44. | Jora-ghái. | |

III.—Percussion Instruments.

- | | | |
|---------|--|-----------------------------------|
| No. 45. | Mandirá (played with Dholoka). | |
| „ 46. | Kartál (played with Khol). | |
| „ 47. | Rám kartál (played with Hárák). | |
| „ 48. | Káusi (played with Dhol and Dháka). | |
| „ 49. | Kánsara. | } Played on occasions of worship. |
| „ 50. | Ghantá. | |
| „ 51. | Gharí. | |
| „ 52. | Kattál. | |
| „ 52½. | Núpur (tied round the feet in dancing to beat time.) | |

IV.—Wind Instruments.

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|---------|--|---|
| No. 53. | Sánái, Rasonchouki. | } Played together in concert with Nágára. |
| „ 54. | „ Totá. | |
| „ 55. | „ Bengál. | |
| „ 56. | „ Jorá. | |
| „ 57. | Algozá. | |
| „ 58. | Mohana bánsí. | |
| „ 59. | Laya bánsí. | |
| „ 60. | Kalam. | |
| „ 61. | Sankha (played on occasions of worship, particularly during the worship of Lakshmi). | |

No. 61½. Tubrí (played by snake-charmers).

„ 62. Singá (blown with Khol).

„ 63. Mochanga.

No. 1. *Víná*.—The *Víná* is the most ancient instrument of India, and its power of emitting sound is remarkable. Allusion is made in the *Yajurveda* to a *Víná* said to have been invented by the sage *Yájnavalkya*, which had one hundred wires. It is now not in use. The invention of the *Víná* at present used is attributed to the sage *Nárada*. It has a gourd attached to each of the artificial columns, called *Danda*, made of bamboo, or the body of the instrument. Sanskrit writers on music have attempted to establish a fanciful resemblance between the human body and the *Víná*, one of the gourds of which is considered to be the abdomen and the other to be the skull. This instrument is also called *Mahatá* or *Vrihatí Víná*. It has seven wires, three steel and four brass. Wire No. 2, which is of brass, is tuned to the pitch of C. Steel wire No. 1 is tuned to the fourth or F. It is called *náyakí*, or the principal wire. Wire No. 3 of brass is tuned as fifth or lower G. The brass wires Nos. 4 and 5 are tuned as *sur* or C of the same octave. Of wires No. 6 and 7, both of which are of steel, the former is tuned as *sur* or C of the octave higher than the second brass wire, and the latter as *sur* of the octave next higher than the sixth wire. Wires No. 2 to 7 are used as accompaniments to the principal one (*náyakí*), though No. 2 is occasionally used for the purpose of producing notes of a lower octave.

Upon the bamboo-roller and key-boards metallic frets of steel are stuck on wax. The arrangement of the fret is like that of the English chromatic scale, which is called in Hindustani *achul thát*.

The *Víná* is held over the left shoulder, and the first and second fingers of the left hand work upon the frets. It is played by the first finger of the right hand. At the time of playing the performer covers the tops of those fingers with plectrums, and the fourth finger of the right hand is used to strike wire No. 5 as an accompaniment to the tune. The third finger is scarcely used at the time of playing.

No. 2. *Setára*.—Another description of *Víná*, called *Kachchhapa*, prevails in all parts of this country. People now call it “*Khachhúa Setára*.” The common name of *Setára* has been given to *Kachchhapa*, *Tritantri* and other *Vínás* by Amír Khusrau, the celebrated poet of the court of the Pathán king Ghias-ud-din Balban, who reigned in the 13th century of the Christian *era*. Though the term *Setára* (*se* means three and *tára* wire) seems to correspond more with our *Tritantri Víná*, *Tritantri* much resembles the *Kachchhapa* in shape; but the hollow of the latter is formed of a gourd, whereas that of the former is generally made of wood. There is also a difference in the number of wires. The number of wires in the *Kachchhapa* is between five and seven. It is called *Kachchhapa*

owing probably to its hollow shape, being flat like the shell of a *Kachchhapa* (tortoise). It is described in the Hindu *Sāstras* as the instrument used by *Sarasvatī*, the Goddess of Learning. The *Kachchhapa* contains seven wires, of which four are of steel and three of brass.

Wire No. 1, which is of steel, is called the *Nāyukī* or the principal wire, and is frequently used. It is tuned as F.

Wires Nos. 2 and 3, which are made of brass, are tuned in unison as *sharjā* or C.

Wire No. 4, made of steel, is tuned as fifth or G of the same octave.

Wire No. 5, made of brass, is tuned as C of an octave lower.

Wires Nos. 6 and 7, both of which are of steel, are respectively tuned as *sharjā* (C) of the octave next higher than the second wire and as G of the octave next.

These two small wires are attached to the side of the *Setāra*, and are termed *chikarī*. All the wires, save Nos. 1 and 2, are only used for accompaniments. Seventeen frets made of steel are placed upon the key-board, and are tied to it by gut strings. Two and a half octaves can be compassed in this instrument. At the time of playing, the back of the *Setāra* is to be placed in the front of the player, the side of the gourd to be held tight by the wrist of the right hand, and the roller to be loosely supported by the left hand. The first finger and the second finger of the left hand run over the frets, while the first finger of the right hand, tipped with the plectrum, is used on the wire upon the space next to the frets above the neck of the instrument as with the guitar. The sound of the *Setāra* is very much like that of the *Nārada Vīṇā*. Passages which with much difficulty are performed on the *Nārada Vīṇā*, can, with slight exertion and with the greatest facility, be nicely performed by means of the *Kachchhapa Vīṇā*. There is a good deal of similarity between the *Setāra* and the guitar of modern Europe. The author of the "Encyclopædia Britannica" traces the origin of the latter to the former. Dr. Adolf Marcus, the author of the "School of Universal Music," says that guitar is the *Setāra* in a different shape, and is called *Jetar** by the Germans. Among old European and other races it was known by the Persian name of *Setāra*, the very word introduced into India in modern times by A'mir Khusrau.

The author of the article in the *Britannica* goes on to say:— "In days of old, when there was frequent commercial intercourse between the people of India and Persia, the latter introduced the *Kachchhapa Setāra* into their own country, and designated it

[* An instrument not unlike the *Setāra*, having metallic strings, and known in Germany under the name of the *Zitter*.—EVERTON.] played somewhat in the same way, is

Setära. But long before the famous A'mir Khusräu had adopted this name, it went here by the name of *Kachchhapa*. By being a little more changed in shape, than when it had been first brought into Persia, it obtained the name of Guitar in Arabia, *Asore* in Asia Minor, *Khitara* in Old Greece, *Himore* in Jerusalem, *Hisar* in Nubia, and different other names in other countries. That guitar gets its name from Arabia is admitted by Dr. Barni in his history of music. By a reference to Mr. Bees's Encyclopædia, it will be seen that in the 9th century of the Christian era, when the Arabians conquered Spain, they introduced the guitar there. In course of time it spread over all Europe, and is now known by a variety of names in different countries of that quarter of the globe, according to the changes it has undergone in shape. The *Kachchhapa* of India seems to be the original model after which similar instruments in Europe have been made."

No. 3. *Tritantri Viná*.—The *Tritantri Viná* is almost similar in shape to the *Kachchhapa*. But it has three wires attached to it, and instead of a gourd it has a hollow wooden block. The second or middle brass wire is tuned as C; the first steel wire is tuned as fourth or F. The third wire, which is of brass, is generally tuned as G of the lower octave. This instrument is played in the same way as the *Kachchhapa*, though being smaller and of less capability it is not quite adapted for the performance of the difficult pieces of *Rāgas*.

No. 5. *Rudra Viná* or *Rarāb*.—Previous to the conquest of India by the Muhammadans, this instrument was called in Sanskrit *Rudra Viná*. The Muhammadans subsequently gave it the name of *Rarāb*, though something like it existed in Persia.

The *Rarāb* is carved out of a solid piece of wood. The hollow part at its bottom used to be covered with the skin of the iguana. Over this part is placed an ivory bridge called *swari* (a supporter for strings).

There are six pegs on the roller, to each of which a gut string is attached, reaching the bottom perpendicularly. The metallic wires are seldom used in this instrument, and the six gut strings are tuned in the following manner:—The second is tuned as D, the first as fifth or higher G, the third as C of the same octave, the fourth as A of the lower octave, the fifth as E of the same octave, and the sixth as C of the same octave.

The *Rarāb* has no frets arranged on it. At the time of playing the body of the instrument rests on the left shoulder of the player, while its bottom is placed on the ground. A thick scale of fish is tied to the tip of the first finger of the left hand with a piece of thread. With the flat surface of this piece of scale the strings are lightly pressed, while with a plectrum made of sandal-wood or a piece of ivory, and held between the first finger and thumb

of the right hand, the strings are struck. All the strings are used for producing different notes.

Captain Willard says that the *Rarāb* resembles the Spanish guitar in shape and tone. How far he is correct we cannot say. But when compared with the old European instruments, whose drawings we have seen, namely, mandolin, &c. (*vide* "Encyclopædia Britannica"), it seems to bear a great similarity. Hence it appears that the Spanish guitar and the old European mandolin are imitations of *Rudra Vinā* or the *Rarāb* as it is now called.

No. 6. *Surada Vinā* or *Surada*.—The *Surada Vinā* is also an instrument carved out of an entire piece of wood. The hollow part used to be covered with the skin of the iguana, but latterly it is covered with any other thin skin. There are no frets arranged on this instrument. Six gut strings are attached to the six pegs. Sometimes six wires made of steel or brass are placed in their stead according to the option of the players. But this practice is not general. Seven or eleven strings made of brass pass in another row through the bridge below the cat-guts, and are attached to the pegs on the side of the instrument. These are called *jārāfi* and are tuned in the diatonic scale, but they are simply acted upon by the vibration caused by striking the six principal gut strings. At the time of playing it is placed, like the *Setāra* in the front, slightly supported by the left hand of the player; and is sounded like the *Rarāb* by a plectrum called *jova* in Persian, made of a piece of ivory, wood or bamboo, and held between the thumb and the first finger of the right hand, while the gut strings upon the wooden finger-board, over which there are no frets, are pressed with the fingers of the left hand. All the fingers of the left hand (but not the thumb) are generally used at the time of playing. There is some peculiarity in playing the gut strings in this instrument. On the score of the proximity of gut strings Nos. 1 and 2, and of Nos. 3 and 4, each of these two couples is tuned in unison, and is simultaneously pressed by the fingers. But gut strings Nos. 5 and 6 are placed and played separately. Although there are six gut strings they are tuned to four tones only, for Nos. 1 and 2, and 3 and 4 present only two tones. In fact four gut strings are of practical use, and gut string No. 6 serves as an accompaniment. This instrument is not, like the *Setāra* and others, so popular in Bengal as in the North-Western Provinces. During the Muhammadan period of Indian history, it was one of the instruments used in processions. When the Muhammadan emperors came out of their palaces for recreation or for other purposes, they were preceded by elephants or camels upon whose backs the *Surada* players sat and played. But in modern times it has been included under the head of drawing-room instruments. Sometimes it is played in accompaniment to the

voice. It is in use in Afghanistan, Arabia, and other Asiatic countries; but the Arabian *Suruda* is a little smaller in size than and differs a little in shape from the Indian one. This instrument in a different shape is used in Egypt by the name of *Gobbab*.

No. 8. *Sur Báhar*.—The *Sur Báhar* differs from the *Kachchhapa Víná* only in shape. Its hollow is sometimes made of wood and is larger than that of the *Kachchhapa*. Like the *Kachchhapa* the *Sur Báhar* has seven pegs stuck to it, on which are fixed as many metallic strings. In addition to these a piece of wood is attached to a side of its wooden bar or finger-board, to which are stuck a number of small pegs, generally seven or eleven, on which as many side strings are fastened. As there is a piece of wood or ivory on the sounding-board on which the seven strings rest, so there is a similar wooden or ivory piece of small dimensions for these side strings. This instrument is held and played upon like the *Kachchhapa*. Its tuning and the mode in which the frets are arranged on its bar or finger-board are imitations of the *Kachchhapa*. The side strings are played according to the will of the player. In this instrument the seven principal strings only are played as in the *Kachchhapa*, while the side strings serve the purpose of merely echoing the principal ones. The *Sur Báhar* is larger than the *Kachchhapa*; consequently its sound is more sonorous and melodious.

Should any skilful artist take particular care in constructing the *Kachchhapa* on a larger scale, its sound will not be found to be inferior to that of the *Sur Báhar* in any respect. The *Sur Báhar*, which is of a very recent date, is an imitation of the *Kachchhapa*.

No. 9. *Bipanchi Víná*.—The *Bipanchi Víná* resembles *Kinnarí Víná* in many respects. It differs from *Kinnarí* in this respect, that its hollow instead of being made of egg shell, oyster or any metal, is made of a certain kind of gourd of small size called in Bengali *Til Láu*. As regards magnitude, number of strings, tuning, arrangements of the frets, the mode in which it is held and played, and its melody, it exactly resembles the *Kinnarí*. In ancient times, it was customary to attach seven strings to the *Bipanchi*, but now-a-days only five are given to it.

No. 10. *Tamburá*.—The *Tamburá* derives its name from its inventor *Tamburá Gandharva*. Its hollow is made of gourd to which is attached a wooden bar. The sounding board is also of wood. This instrument is used as an accompaniment to song or other musical instruments, to fill up the pauses and add harmony to the music. It has four wires, of which the first and the second are of steel, and the others are of brass.

The *Tamburá* can be very easily played upon. It is used with particular interest by the people of Persia, where it consists of six wires and twenty-five frets. An instrument similar to it was in

use among the Greeks, the Jews, the Turks, and the Armenians. It is still in use among the inhabitants of the countries which lie on the banks of the Tigris and the Euphrates. The instrument known among the husbandmen of Italy, by the name of Colascione, appears to be somewhat like the *Tamburá*.

No. 11. *Ektára*.—This instrument is made of two-thirds of a gourd covered with skin. A bamboo staff having a peg on its top is attached to the gourd. It has a single steel wire which is tuned by every player according to his natural voice.

No. 13. *Sáringi*.—This instrument has been in use in India from time immemorial. Its hollow is made of wood and is covered with a thin skin. Its finger board is of wood. There are two pegs on each of the sides above the roller. Four gut-strings are attached to these four pegs. There are a certain number of extra pegs on the side of the roller to which are attached an equal number of brass wires. The number of pegs depends upon the option of the maker of the instrument. The two lower of the four gut-strings are tuned to *Kháraj* or C, and the others to a perfect fourth.

At the time of playing, the *Sáringi* is placed in front of the player in a erect posture, and made to lean against his breast. It is played by means of a bow, held by the right hand, while the nails of the fingers of the left hand (not the thumb) press the sides of the gut-strings.

Sáringi is used in drawing-rooms, in dances, and as an accompaniment to the female voice. It assists the fair sex in singing. Its sweet sound accords so well with the female voice, that no Indian songstress can be induced to sing without the accompaniment of this instrument. The *Sáringi* is used all over India.

No. 14. *Mayurí* or *Tavush*.—From the hollow to the roller *Mayurí* is framed entirely of wood. Its hollow is covered with a thin skin; and has the neck of a *Mayurí* (peacock) attached to it. Hence its name *Mayurí* in Sanskrit and *Tavush* in Persian. There are 16 frets in this instrument as in the *Kachchhapa* and other *Vínás*. Loosely holding the back of the roller with the left hand, it is played with a bow by the right hand. At the time of playing, the forefinger and the middle finger of the left hand are frequently used. Four wires are attached to the four pegs above the roller; of these, two are of steel and two of brass. Wire No. 1 (*i.e.*, *Náyakí* wire) is only used for playing. The other three wires are used as accompaniments. The number of extra brass wires attached to this instrument depends upon the option of the player, and these are only used to give a variety of sound. Full two octaves can be compassed by means of this instrument. It serves to add to the sweetness of the feminine voice, and is used as an accompaniment to the songs of females. It is tuned like the *Setára*.

No. 17. *Sura Sá*.—This instrument is entirely made of wood.

Almost all those musical pieces which are performed on the *Esár*, can be performed on this instrument.

For much valuable assistance in preparing the above account of Hindú musical instruments, we are indebted to the country of Rájá Jotindra Mohan Tagore.

On the 10th February 1872 a new dramatic performance, *Rukminiharan*, took place at the house of Rájá Jotindra Mohan Tagore. The play is founded upon an episode of the *Mahábhárata*; and describes the love of Rukminí for Krishna, and their subsequent elopement.

The father of Rukminí growing old and physically unable to take an active part in the performance of his regal duties, delegated the cares of his kingdom to his son Rukmángada. He, however, fully retained the use of mental faculties and his affection for his daughter, Rukminí, was undiminished by age. While thus situated, he received a visit from Nárada, the son of Brahmá. In the course of conversation, Nárada gave a glowing description of the godlike character and superhuman qualifications of Krishna. The description was listened to with breathless interest by Rukminí, who was present; and it inspired her with infinite love for Krishna. Her sentiments being understood and sympathised with by her father, he resolved to marry her to Krishna. With this view he proceeded to the sitting room of his son who was then engaged in playing at *Pásá* or dice. He communicated his intention to his son, who scouted with scorn the idea of the marriage of his sister with the son of a cowherd. His father repeatedly and eloquently dwelt on the transcendent merits of Krishna, but he would not admit them and continued to heap upon the latter abusive epithets. Ushmaka returned to his apartments crest-fallen. Then Rukmángada entered into a contract for the marriage of his sister with Sisupála, Rájá of Chedi. As the day of the marriage approached, Rukminí determined to escape it and to seek the protection and affection of Krishna. With this view she wrote to Krishna a letter unlocking the secret of her passion for him, and entreating him to come and save her. She deputed a poor Bráhman by name Dhanadása to carry this letter to Krishna at Dwariká. On the receipt of this letter Krishna came down in his *Byomayána* or aerial carriage and rescued Rukminí from the tyranny of her brother, threatening to consign her to a forced and detestable marriage. Rukmángada and his people shewed fight, but were unable to cope with Krishna and his sturdy brother Valaráma. On the arrival of Krishna and Rukminí at his place in Dwariká a large assembly was convened, in whose presence they were married with great *eclat*. Of all the actors on the present occasion, Dhanadasa acquitted himself most admirably. Although belonging to a tribe not conspicuous for wit, yet he displayed great hu-

mour. He was in fact the buffoon of the play, and as usual exhibited love for the luxuries of the table combined with much ready wit.

Rukminí was followed by a farce called *Uvaya Saukat*, describing the evils of polygamy.

The farces enacted at the *Páthuriágháttá* Theatre keenly satirise the prevailing vices; and are all calculated to evoke mirth, which has been well defined to be the forgetfulness of gloomy considerations in the present feeling of present happiness. They not only move us to merriment, but shut out all impressions calculated to disturb our equanimity. Although they attack with merciless severity the imperfections and the peculiarities of the present generation, yet they do not render the same the objects of our dislike. They merely point out the ludicrous infirmities of the Hindus during the present state of transition; but never excite disgust with their moral character.

The *Páthuriágháttá* Theatre is now an institution, and the only institution worthy of the purpose to which it was dedicated. Thanks to the enterprise, public spirit and enlightened liberality of *Rájá Jotíndro Mohan Tagore* and his worthy brother *Sauríndra Mohan Tagore*, it has achieved a degree of success, which, considering the paucity of dramatic talent, is to be wondered at. Not only have the celebrated *Nátukas*, *Málatí-Mádhava* and *Málavikágnimitra* been admirably performed, but the farces composed for the occasions have well depicted the manners and customs of the age.

Last year, a Theatrical Company, called the National Theatrical Company, was started at *Jorasanko*, *Chitpore Road*, which aimed at the establishment of what may be termed a public theatre. The actors received pay, and tickets of admission to the theatre were sold to the public. We are informed that the performances of this company were marked by energy and originality and generally excited admiration. They attempted every department of stage acting, *viz.*, tragedy, comedy, farce, and pantomime. They were invited to repeat their performances at the *Calcutta Opera House*, *Howrah Railway Theatre*, and at the *Eastern Bengal Theatre, Dacca*, in aid of certain public charities, and only lately they were engaged to perform at the house of the *Rájá of Dighápatíá, Rájsháhi*, on the occasion of his son's *Annaprásan*. We understand that financially the speculation is a success, and it is proposed to apply the surplus funds at the disposal of the company to the erection of a suitable house for the theatre.

In the drama as in politics the Hindus are in one of those epochs of transition which are characteristic of a nation that has made rapid progress in education, among whom the old times are being changed, the old ideas exploded, the old watchwords lost and the old land-marks swept away. We hope and trust that acting will soon be raised to the dignity of an art, and not

followed as a profession by men belonging to the low class of *Játrá-wallahs*. It is an art for which, as Barton Booth has said, the longest life is too short. We also hope and trust that the modern Hindú theatre will, in the words of an intelligent critic, become to the spectators as it ought to be, not merely the pastime of an idle hour, but a place of study, a whetstone of the imagination and the sympathies, a revealer of the secret springs of character and emotion, and of the subtler beauties of our finest poetry. They would learn at the same time to appreciate the niceties and the difficulties of histrionic art; and by their knowledge be enabled to stimulate merit and rebuke defects or carelessness, instead of encouraging (as audiences too often do at present) whatever is most false in conception and meretricious in style.

We hope and trust that now that Bengal has taken the lead in intellectual advancement, and the Bengali language is being enriched and approximating to the standard of the European languages, original dramatic literature will soon be created.

We would advocate the establishment of a public theatre as the best way of perpetuating the drama. Now, that private gentlemen of means and position have given the impetus, the public should take up the drama in right earnest, and show their practical appreciation of it by building a fitting abode for its representation.

GISSORY CHAND MITTRA.

[WE deeply regret to have to announce that, whilst the foregoing article was in process of being set up in type, its amiable and talented author departed this life, on Wednesday, August 6th, 1873. For nearly thirty years, Bábu Gissory Chand Mittra has been an occasional contributor to this *Review*; and his articles, rendered singularly valuable both by the special knowledge which he owed to his varied experience, and by the freedom and candour with which he expressed his opinions, always met with a favourable reception from the Press and the public. The first paper put forth by him in the *Calcutta Review* was one on the life and times of Rájá Rám Mohan Ráy, published in October, 1845. During the last two years his contributions have been numerous; and the present Editor is largely indebted to him for most valuable assistance in compiling the series of historical and topographical memoirs now in course of publication in these pages, under the general heading of *The Territorial Aristocracy of Bengal*. Without the aid of Bábu Gissory Chand Mittra it would have been impossible to continue that series; and the portion that has already appeared owes much of its interest to his extensive knowledge of the country and its history. By his death the *Review* has lost one of its most constant and most valued supporters.—EDITOR.]

ART. V.—CHRISTENDOM AND ISLAM.

A Critical Examination of the Life and Teachings of Muhammad. By Syed Ameer Ali, Moulvi, M.A., LL.B., of the Inner Temple, Barrister-at-law.—London. Williams and Norgate.

THE "Critical Examination of the Life and Teachings of Muhammad" by Syed Ameer Ali is in one respect a very remarkable work, and most creditable to the author. It exhibits an easy idiomatic command over the English language, and is written in a style free alike from redundancy or turgidness; very rare among educated Englishmen, and quite marvellous in the case of a native of this country. The Syed seems to have shaken himself clear of all the defects of manner which mark the English compositions of an educated Hindustani; the characteristics of his book being an absence of all straining after effect, and a perspicuous brevity. Regarded simply as a literary achievement, we have never read anything issuing from the educated classes in this country which could be compared with it; and the Muhammadans of India are to be congratulated on the possession of so able a man in their ranks. It is impossible, if his after-life accords with this early promise, that he should not leave his influence for good stamped upon the country in deep and enduring characters. But with the greater part of what the book contains, we differ profoundly, and these differences and the reasons for them we propose in the following paper to set forth in considerable detail.

A "critical examination" in the European sense of the expression the Syed's book cannot be called. Such an expression conveys the impression of a careful analysis of the *Koran*, chapter by chapter, a setting forth of the precise circumstances under which each was written, a tracing out of their relations to the actual events which inspired them, and the larger application which they have since obtained from the efforts of commentators and under the pressure of vast and unforeseen complications. A critical examination again of the life of Muhammad would necessitate the working out, as an essential preliminary, of some theory as to the relations in which man stands to his Creator. Muhammad claimed to be the Prophet of God. In order to pass judgment on such a claim, we must know: 1.—Is there a God? 2.—Can He enter into direct communication with minds constituted as ours are? 3.—What proofs are there that he has ever done so? 4.—Does the life of Muhammad accommodate itself to such proofs, if any are to be had? The Syed does not touch upon any of these questions. He assumes that there is a God, and that Muhammad was His Prophet; and quite consistently with this assumption, he employs a single but

very powerful principle of criticism. He rejects as untrue all that is recorded unfavourable to the Prophet; he accepts as true all that is written in his favour; and under this treatment, it is needless to say, that the flaws which are generally supposed to mar the perfection of the Prophet's character disappear with amazing rapidity; and the Founder of Islam stands forth a living miracle of virtue, magnanimity, and wisdom. Now, it would ill beseem any follower of Christ to quarrel with a Muhammadan because he places far above all human kind the character of his Prophet; but the Syed is not content with merely doing this. His book is not addressed to his countrymen, the great majority of whom could not read it, nor understand the drift of much of the reasoning if they could. It is addressed to Christians; the Syed holds, so to speak, a brief for the defence of Islam; and there runs, through his book, a constant side-current of depreciation levelled at Christians and most of that which Christians regard as sacred. Many of these little side-rushes are exceedingly amusing. The Syed seems to be under the impression that he is gifted with a power of divination which enables him to seize points of truth after which European scholars have been hunting for centuries. He settles them off-hand in a single paragraph or a brief note. For example he knows that "a want of firmness" made "Jesus a victim to the vengeance of the vested interests of His day." But for this He would like Moses have "struck awe into the hearts of a back-sliding rebellious race." He knows that St. Paul "infused into the simple teachings of his master the most mysterious principles of neopythagoreanism with its doctrine of intelligences and its notion of the triad borrowed from the far East." He knows that "the influence of the Essenes" is reflected visibly in the teachings of Jesus. He is certain that had Jesus lived longer, "He would have placed His teachings on a more systematic basis." He knows that the only true Christians—those alone who rightly understood the teaching of Christ—were "the Ebionites." When a magician of this kind, possessed as the papers say of special and exclusive information, appears upon the stage, the new light he throws upon the past is amazing. All things become new. The Prophet, it appears, who had nine wives, and was not content even with that number, was, in truth, an ardent champion of monogamy; the religion of the Sword was really a species of Quakerism which waded knee-deep in blood through half Europe and Asia with no other desire than to administer the kiss of peace to all humanity; slavery, it need hardly be said, was "completely abolished" by Islam—the whole history of Muhammadanism, and the present state of society in Muhammadan countries, establishing that fact beyond the reach of cavil. Our readers will readily

perceive that in the presence of Muhammadanism as depicted by the Syed, Christianity and Christ cut a very poor figure. With regard to Christ, the Syed in truth takes up a very lofty position, and finds Him in the main a plagiarist from the Essenes and other unacknowledged sources. Christianity as the product of this feeble and incompetent founder is necessarily good for very little, and the Syed—who does not hesitate to re-construct the history of Europe—declares that the issue of the Battle of Tours was one of the greatest calamities that ever befell the human race. The reason he advances for this rather startling proposition, is that had the Muhammadans overrun Europe, the massacre of St. Bartholomew would have been averted. And certainly he is right so far, in as much as the chances are that in such a case there would have been no Protestants to massacre. From all this it will, we think, be apparent that this “critical examination” is, in fact, a challenge addressed to the Christian world, to come forth and fight in defence of their faith; and as such I accept it. The questions I shall discuss are two: 1.—Is the Syed’s account of the Life and Teaching of Muhammad a correct one? 2.—Allowing it to be correct, would it be possible to make it, at the present day, the basis of a religious faith for any of the advanced nations of the world?

The life and teaching of Muhammad—There is not, I suppose, any thoughtful Englishman who knows any thing at all about the matter, who doubts that Muhammad in his youth really believed himself to be called by God to turn his countrymen from the worship of dumb idols to the service of the living God. The “impostor” theory has long ago been given up as untenable. But Englishmen, in general, will admit much more than this. They will admit that Muhammad was a Prophet sent from God to the Arabs in precisely the same sense that Jeremiah or Isaiah was a Prophet sent to the Hebrews; and that in carrying out this mission he exhibited under persecution, a lofty heroism and magnanimity worthy of all admiration. These great qualities reaped their appropriate harvest. One man after another confessed that, in the words of the young Prophet, he discerned a higher manifestation of the Divine than dwelt in idols. They became his followers; and so at length he grew to become chief ruler of the city of Medina. So far Christians and Muhammadans are at one; up to this period the veneration which the one demands for his Prophet, the other will cheerfully concede. But here they begin to diverge. The Christian historian asserts that when once possessed of power Muhammad lost the singleness of aim, and purity of mind and act which had formerly distinguished him: and instances, in proof of this, the cruel practice of assassination which he protected

and encouraged at Medina. The Syed is of course indignant, and breaks out in the following strain :—

"The Christian biographers of the Prophet of Arabia, probably under the influence of that fine sentiment called "Christian verity," have denominated the punishment of criminals, "assassinations," "murders," or "barbarous deeds" which, to the general reader, convey such an idea of horror as to revolt him, before he has time to reflect on the candour of the historian. An individual, enjoying the protection of the Moslems, stirs up rebellion against them or fomented disunion in their midst ; he is put to death. This is assassination according to these historians. A woman, the leader of a band of determined robbers, guilty of cruel deeds, is taken prisoner. Some of the wild followers of Muhammad, not more advanced in their notions regarding the cruelty or humanity of punishments than the surrounding nations, their civilised neighbours, the Greeks, the Persians, or the Hindus—unknown to the Prophet, put her to death with circumstances of cruelty. This is at once set down to Muhammad and he is pronounced "to be an accomplice in the ferocious act." The historian admits that she was put to death without the knowledge of the Prophet, and he condemns him as an accomplice. As to the cruelty of the punishment he forgot that Christian England hanged men and women for stealing a few shillings up to the middle of the 18th century ; he forgot the terrible tortures of the rack and the stake which destroyed myriads of innocent beings in Christian Europe.— P. 124.

Here we have a distinct statement that Christian Historians, inspired by a lying spirit known as "Christian verity," have accused the Prophet of countenancing the practice of assassination, when in point of fact he never did any thing of the kind. Can this be asserted with truth ? I think not. It is true that men and women were hanged in "Christian England" so late as the eighteenth century, for stealing a few shillings, and that myriads of human beings have perished at the stake and on the rack ; but I fail to see the relevancy of these facts to the matter under discussion. No one wishes to defend such practices or those who perpetrated them ; far less to invest them with a divine sanction ; and even the Syed will probably admit that if Muhammad did connive at the practice of assassination, he was not led away by the bad example of "Christian England" in the eighteenth century. "An individual," says the Syed, "enjoying the protection of the Moslems, stirs up rebellion against them, or fomented disunion in their midst ; he is put to death. That is assassination according to these historians." Not at all ; assassination, according to these historians, does not mean the simple act of putting a criminal to death ; but the manner in which he is killed. The whole question hinges upon that point. I may observe *passim* that I object altogether to the expressions "enjoying the protection of the Moslem"—"fomenting rebellion against them," and the like as conveying a false impression of the position of Muhammad and his followers at Medina. The Prophet at that time was simply the leader of a small party, possessing neither the moral nor the legal right

to put any one to death; and it was, in truth, the consciousness of this imbecility that caused Muhammad to have recourse to the dagger of a murderer. But it would occupy too much space to prove this. Taking, therefore, the Syed's account as a correct one, were these offenders "put to death" or were they assassinated?

The first victim was a woman, Asma, daughter of Marwan; she had composed some satirical verses on the Prophet and his followers; and according to Hishami, the Prophet moved to anger, said publicly, "Who will rid me of this woman?" Omeir, a blind man, heard the speech, and at dead of night crept into the apartment where Asma lay asleep, surrounded by her little ones; and plunged his sword into her breast. The next morning, at the Mosque, Muhammad asked him, "Hast thou slain the daughter of Marwan?" "Yes," Omeir answered, "Is there any cause of fear for what I have done?" "None whatever," replied the Prophet; "two goats will not knock their heads together for it." Then, turning to the people assembled in the Mosque, he added; "If you desire to see a man who hath assisted the Lord and His Prophet, look you here!"

The second victim was also a Jew—a very old man guilty of the same offence, that of writing satirical verses on the Prophet. He was murdered in the middle of the night at the express instigation of Muhammad. The third victim was Kab, the son of Ashraf, also a Jew. With the command and express approval of Muhammad, a party of Moslems enticed him under a guise of friendship to a lonely water-fall, and there cut him to pieces. After this last murder, Muhammad gave his followers a general permission to slay any Jews they might chance to meet; and this permission was immediately followed by the murder of a Jewish merchant, apparently for his wealth, by a Moslem who united a zeal for the Faith with a proper appreciation of the good things of this world. Comment on these facts is needless; if they are not to be classed under the designation of "assassination," murder has never yet been committed by any one.

The second dark stain which rests upon the fame of Muhammad is the massacre of the Jewish tribe of Kuraizha. We quote the Syed's account, only prefacing that there was, in this instance, a fair *casus belli*. It was not an unprovoked attack on the Jews, but one brought on themselves, by their own actions.

Under the guidance of Muhammad they (the Moslems) immediately marched upon the Jewish fortresses, and after siege of twenty-five days the Banî Kuraizha offered to surrender on the terms granted to the Banî Nadhir. This was refused, and they were required to surrender at discretion. Relying on the intercession of their old allies, the Aus, and on the condition that their punishment should be left to the judgment of the Ausite chief, Sad

Ibn Mu'âlz, they submitted at discretion. Unhappily this man infuriated by the treacherous conduct of the Banî Kuraizha and their untiring hostility to the new faith, passed a sentence of unusual severity upon them. He ordered that the fighting men should be put to death, and that the women and children, with all their belongings, should become the property of the Moslems. This deplorable sentence was inexorably carried into execution."

There are a few particulars which must be added to this account. Muhammad had determined upon the destruction of this tribe from the very commencement of the siege, and when Sâd spoke his judgment, he confirmed it saying, "Truly thou hast decided according to the judgment of God pronounced on high from beyond the seven heavens." The wretched captives were brought forth in parties of five and six at a time and beheaded, the Prophet standing by an unmoved spectator of the tragedy. On this transaction our author comments as follows :—

"I simply look upon it as an act done in perfect consonance with the laws of War as then understood by the nations of the world. These people brought their fate upon themselves. If they had been put to death, even without the judgment of Sâd, it would have perfectly accorded with the principles which then prevailed. But they had themselves chosen Sâd as their sole arbitrator and judge; they knew that his judgment was not at all contrary to the received notions and they never murmured. They knew that if they had succeeded, they would have massacred their enemies without compunction. People judge of the massacres of King David according to the "lights" of his time. Even the fearful slaughters committed by the Christians in primitive times, are judged according to certain "lights." Why should not the defensive wars of the early Moslems be looked at from the same standpoint? But whatever the point of view, an unprejudiced mind will at once perceive that not the slightest blame can be attached to the Prophet in the execution of the Banî Kuraizha."

There will be some difficulty in making our way through this ingenious web of sophisms, but with a little care and patience I think it can be managed. The Syed does not seem to perceive that his argument regarding "lights" would result in depriving the Prophet of all that moral grandeur of character wherewith he desires to invest him. Doubtless, if we contemplate the Prophet merely as a Bedouin chief carrying on war according to "the lights" of his day, we shall not regard his massacre of the Jewish tribe with greater wonder than the massacre of the Amalekites by Samuel, or the Ammonites by David, but we shall regard it with precisely the same moral disapprobation. We do not accept the acts or teachings of Samuel or David as a perfect guide for conduct precisely because they perpetrated deeds of this kind; we find a higher type of humanity in Christ. But what the Syed wishes us to perceive in Muhammad is a being even more perfect than Christ, with loftier and purer moral energies and a grander purpose. It is absurd to insist upon this on one page and then on the next to ask us to judge this sublime personage only by "the lights" of his time—the lights, that

is, possessed by a people sunk in the grossest idolatry. When the Syed says that "an unprejudiced mind will at once perceive that not the slightest blame can be attached to the Prophet," we suppose he must be joking. The Prophet at that time was supreme in Medina; every utterance that came from his lips was supposed by his followers to be a divine decree issuing directly from the throne of God; he himself assumed that character, and there can be no doubt, that it rested with him whether the Kuraizha perished or not. He chose the former alternative; and his character as a Teacher of Humanity must stand or fall by it. If Muhammad really believed it to be will of God that these men should be slaughtered and their wives and children sold into slavery, he ceases *ipso facto* to be a moral exemplar for the present generation and those that will come after. If he did not believe it, but only pretended to do so, he sinks at once into an impostor, and except as a historical figure ceases to have any significance for us. It is moreover misleading to say that this act was "in perfect consonance with the laws of war as then understood." It was contrary to precedent. Two other Jewish tribes had been conquered only a very short time previously by the Moslems of Medina, and no such hard measure had been dealt out to them. They were simply expelled from their settlements, or as the Syed puts it, "the clemency of Muhammad's nature overcame the dictates of justice and they were simply banished." Even on the present occasion, as the Syed knows well, the Prophet was passionately entreated by the old allies of the Kuraizha, the Baní Aus, to deal kindly with them, and he himself calls the judgment of Sâd, "a sentence of unusual severity," which it would not have been if it inflicted the recognised and habitual punishment on prisoners of war. There is in truth, no mystery whatever in the motives which guided Muhammad in this transaction if we take the Syed's advice, and judge of it by "the lights" of the time. Muhammad hated the Jews. He acknowledged the authority of their scriptures, holding that he himself was the continuation and completion of the Revelation accorded to them. But this claim the Jews would not admit, and Muhammad, after many fruitless efforts to win them over, became their bitter enemy. "Thou shalt surely," he writes in the fifth chapter of the *Koran*, "find the most violent of all men in enmity against the true believers to be the Jews and the idolaters." But before his power was firmly established at Medina; when many, even of his own countrymen, regarded him and his teaching with extreme dislike and distrust; when the Jews from their number and influence were still formidable antagonists; and his enemies at Mecca were bitter and unrestrained by any check on the battle-field, it was necessary to proceed with caution. He deemed it prudent to provide a

golden bridge for a flying enemy ; and the two Jewish tribes who were first expelled from the neighbourhood of Medina were treated with moderation. But when the Bauî Kuraizha were put to the sword, Muhammad was at the height of his power. The disastrous raising of the siege of Medina had given him an undisputed authority over the people of that city ; the Bauî Kuraizha was the last Jewish tribe left in the vicinity ; and judging the action of Muhammad as Syed Ameer Ali urges us to do, by " the lights " of the time, it is clear to me that the vengeful instincts of the Bedouin chief proved stronger than the natural clemency (a quality he undoubtedly possessed) of the Founder of Islam. Do I then consider Muhammad guilty of conscious imposture when he declared the cruel decree of Sâd to be ratified by the approval of God ? Assuredly not ; any more than I consider Deborah to have been an impostor because she declared the blessing of heaven to rest upon the murderess Jael. There is no such short and easy method to account for the inconsistencies of humanity ; truth and falsehood, good and evil, in thought or speech or act do not stand out in plain and startling contrast, but pass by almost imperceptible shades from one into the other. And such was it in the case of Muhammad. At the basis of his character, the very source and spring of all his energies, lay the belief that he had been called out by God to do a mighty work, but as with many another actor on this world's stage, success dimmed the clearness of his moral insight. He got to regard himself not merely as a Prophet or Interpreter of the Will of God, but a delegate in whom a portion of the Divine authority was literally invested. And so, step by step, he was led along the downward road, confounding the promptings of revenge, the impulse of his own ambition,—nay even the appetites of the flesh, with the mandates of the most High God. In all this, he merely trod a path which has been trodden by a multitude of religious reformers before and since ; but not the less fatal to his claim to the permanent allegiance of mankind. The moment we can criticise our benefactors in the light of a fuller knowledge than they possessed, the relation of Master and Disciple has ceased. Syed Ameer Ali is himself an unwilling witness to this fact. He knows more than the Prophet ; he knows that this massacre was a bloody and atrocious act ; and so asks us to judge him by " the lights " of that day, feeling well that by " the lights " of this, he would stand utterly condemned.

The third great stigma that according to Western opinion, mars the fair fame of the Founder of Islam, is his incontinence in respect of marriage, and his whole legislation with regard to women. It is regarded among us, as the *tritest* of truths that Christianity has raised the status of woman ; and Islam kept her degraded. It is needless to say that our author considers the exact reverse

of this to be the truth. Jesus Christ, it appears, depreciated marriage; the Prophet with the nine wives was in fact the true slayer of giants who gave the death-blow to polygamy. This is a difficult thesis to make good; but the courage of our author is at least equal to his dexterity in logic. He is dismayed at nothing. This is what he has to say regarding Christ—

“The influence of the Essenes, which is reflected visibly in the teachings of Jesus, combined with an earnest anticipation of the kingdom of Heaven, had led the Prophet of Nazareth to depreciate matrimony in general, although he never interdicted or expressly forbade its practise in any shape. And so it was understood by the leaders of Christendom at various times—that there is no intrinsic immorality or sinfulness in plurality of wives.”

It is amusing to read the familiar manner in which our author speaks of “the Essenes” as though they were gentlemen living in the next street, whom he had known intimately from his childhood. There is very little known about the Essenes, and how that little is “reflected visibly in the teachings of Jesus” I am at a loss to discover. The Essenes were a sect, whose fundamental tenet was borrowed from Persian Dualism; they held the flesh to be the seat of all evil, utterly prohibited marriage and lived in the habitual practice of asceticism; the only part of the Old Testament scriptures which they acknowledged was the Pentateuch, they never crossed the threshold of the Temple or took part in its services, or manifested any interest in the destinies of their country. Christ so far from being an ascetic was continually taunted with the reproach that he was not one, but on the contrary “a gluttonous man, and a wine-bibber, a friend of publicans and sinners”; so far from prohibiting marriage he honoured it with His presence; He caused little children to be brought to Him, saying that “of such were the Kingdom of Heaven;” a marriage feast is one of His favourite images, as typifying the purest human happiness, under which to represent the Kingdom of Heaven; and He declared emphatically that marriage was a divine ordinance and that “for this cause a man should leave father and mother and cleave unto his wife, and they twain should be one flesh.” In these words He laid down the animating soul, the essential idea of Christian marriage; and if the Syed knows of any Christian Divine who ever thought or said that polygamy was not sinful and immoral in a follower of Christ, I should be glad to hear his name. Of course this, like every other precept of Christ, has been transgressed by Christians times out of number, but it had at least this effect. Polygamy has never become a legalised institution in Europe. This, however, is foreign to our immediate purpose. We will pass on to what our author has to say on the laws of marriage the *Koran*

“Among Muhammad's own people, the Arabs, unlimited polygamy prevailed, prior to the promulgation of Islam. A man might marry as many

wives as he could maintain, and repudiate them at will. A widow was considered as a sort of integral part of the heritage of her husband. As the legislator of his own nation—the benefactor of the human race at large, it was Muhammad's mission to provide efficient remedies for all these accumulated evils. By limiting the maximum number of contemporaneous marriages, by giving rights and privileges to the wives as against their husbands; by making absolute equity towards all obligatory on the man; by guarding against their being thrown helpless on the world at the wilful caprice of a licentious individual, Muhammad struck at the root of the evil.

But it is the negative part of the law which shews the profound depth underlying it. The proviso we refer to is not only qualitative in its character, but serves, in fact, to nullify the permissive clause. Construed plainly, it means—no man shall have more than one wife, if he cannot deal “justly” and equally with all The conditional clause added to the permissive part being essentially obligatory in its nature, noncompliance with its requisites lays the individual open to the charge of contravening the laws of Islam. And hence in every way the law itself may be considered as prohibitive of a plurality of wives.”

These remarks remind me of the rapid multiplication of Falstaff's men in buckram. It was only the penetrating eye of one who had discerned “the influence of the Essenes reflected visibly in the teachings of Jesus” which could have discovered these rich stores of hidden wisdom in the crude and simple laws laid down by Muhammad on marriage and divorce. Except in their after consequences,—in the dismal fact that they sealed through all the regions of Islam the degradation of woman, and to this day make of her wherever the *Koran* is held to be the word of God, “a soulless toy for tyrants' lust,” these laws would be unworthy of examination. They do not exhibit, and indeed it was impossible they should, a glimmer of insight into the refining elevating and spiritualising power of an equal love between man and woman. The woman throughout is treated as a passive agent, who had, of course, no voice in the disposal of herself, but who being a sensitive creature—if you prick her, she would bleed—Muhammad advises a certain degree of consideration for this unfortunate peculiarity; but the laws themselves are neither better nor worse than might be expected from an Arab chief of that day, who perceived the ill-consequences of unlimited polygamy, but never thought of the relations between the sexes as anything but a felicitous arrangement for increasing the pleasures of men. The principal provision is contained in the following passage;—“If ye fear to be unjust unto orphans, fear also to be unjust unto your wives.” *Marry only two, three, or four.* But if ye fear that ye cannot act equitably towards so many, marry one only or the slaves which ye shall have acquired.” The meaning of this last provision is that slaves being an inferior order of animal could be maintained on a less expensive scale than a free woman, and therefore what would suffice for only one free woman would serve

to keep three or four slaves. The word "equitably" refers merely to the establishment—what we should call "pin money"—granted to each wife. The wife who was convicted of infidelity on the testimony of four witnesses was to be kept in solitary confinement until she died, or to quote the language of the *Koran*, imprisoned "in separate apartments until death released her or God affordeth her a way to escape." The duty of beating a refractory wife was expressly enjoined. "Those, whose perverseness ye shall be apprehensive of, rebuke; and remove them into separate apartments and strike them." The right of divorce rested with the man, and was simple and absolute; no restrictions whatever are laid down to limit this power; from all that appears to the contrary in the *Koran*, a man might, at any moment, with or without pretext, turn his wife out of house and home. The following is the rule on the subject,—“Ye may divorce your wives twice; and then either retain them with humanity” or dismiss them with kindness But if the husband divorce her a third, she shall not be lawful for him again, until she marry another husband.” Wives on the other hand have no rights whatever against their husbands. These latter are, it is true, exhorted to treat them “equitably,” but if they decline to do so, the wife has no law to appeal to which might afford her protection. The *Koran* does not contemplate the possibility of a right of divorce existing in her; and the only provision which secures her something is the following:—“If he be desirous to exchange a wife for another wife, and ye have already given one of them a talent, take not away anything therefrom,” and in another place it is stated that it is incumbent upon a true believer to furnish a reasonable provision for a divorced wife. When it is remembered that these two, three or four wives might be supplemented *ad libitum* with slaves; that a Moslem might compel a slave even though already married to cohabit with him; that it is expressly stated in the *Koran* that God will be gracious and merciful to such slaves as are prostituted for the gratification of the Faithful,* it will be apparent to every one that to speak of Muhammad as having dealt a blow at the very root of polygamy is to talk nonsense.

This, however, is not the principal point. The power for mischief inherent in these laws grew, not out of the actual laws, but from the manner of their promulgation. If Muhammad had merely claimed for himself the position of an ordinary ruler and lawgiver, knowing that it was out of his power to abolish poly-

* And compel not your maid servants to prostitute themselves if they be willing to live chastely
... but whoever shall compel them,

verily God will be gracious and merciful unto *such* women after their compulsion.—Sura xxiv.

gamy altogether, but seeking to the utmost of his ability to restrain it within narrow limits, he would doubtless have been a great benefactor to mankind—only in such a case, his laws would have carried no weight beyond the cities of Medina and Mecca. But the position he actually assumed was radically different. He was the Prophet of God ; the *Koran* was the word of God—the direct utterance of the most High. Again and again in the chapter that contains these laws and regulations he seeks to drive them home to the minds of his hearers by the expression “This is the ordinance of God ;” or “This is ordained you from God,” and declares that those who believe not on Muhammad are “the men whom God hath cursed.” They will, he says, be “surely cast to be broiled in hell fire ; so often as their skins shall be well burned, we will give them other skins in exchange that they may taste the sharper torment ; for God is mighty and wise.” Herein lies the vast difference between the Christian Bible and the Muhammadan *Koran* ; the one is the history of a Revelation ; the other is the Revelation itself. The one may be handled in a critical spirit without robbing it of its authority, because it is only the testimony of men recording that which they had seen, and their hands had handled of the Word of Life ; but the *Koran* was declared by Muhammad to be and received by his followers as the very word, the spoken thought of God. Apart from it there was no revelation. These laws about marriage and divorce were not the words of a legislator liable to err, incapable of seeing the complications that would arise in the coming years ; they were the words of God before whom the Past, Present, and Future lay like an open book. They contained the divine idea of the relations which ought to exist between the sexes ; and they have always been acted upon as such. Hence, the degradation of women in Muhammadan lands and their enforced seclusion ; and hence, also the abominable license of female slavery. In regarding women as exclusively created to foster the delights of the other sex, the Muhammadan world has done no more than act up to the commands of the Prophet and the *Koran*. But worse remains behind. The Prophet, as is well known, could not limit himself to the four wives, which number he had declared to be ordained by God. He had nine. Of course our author in this as in all else, can see nothing in Muhammad or his actions that is not entirely admirable, and is as usual very wrath with “Christian writers” who fail to see the excellence of these precedents. These unfortunates are, it seems, in this matter under the possession of another spirit, not “Christian verity” but “Christian charity,” which means “the heaping of vituperation on all the benefactors of humanity unless of their creed.” “A dispassionate examination of facts, a thorough analysis of motives from the stand point of humanity” will, however,

put this matter in the right light, and cover these calumniators with confusion. "This dispassionate examination" results however in a simple statement that the Prophet married some of his wives from political motives, and others in order to provide them with a home. It does not seem to occur to Syed Ameer Ali that such a justification as this is laughably insufficient. If the Prophet had been simply actuated by a charitable desire to support certain indigent women, he might surely have done so without marrying them; while to transgress a divine ordinance for political advantages is conduct not very laudable in a Prophet of God and an exemplar for all humanity. It is, however, idle to discuss these points. It is sufficient to know that Muhammad never attempted to account for his marriages by either the one reason or the other. He boldly said that God had given him a dispensation; that the laws which applied to other men did not apply to him: that what was a sin in them was innocent in him. His words are explicit and unmistakable.

"O Prophet, we have allowed thee thy wives unto whom thou hast given their dower, and also the slaves that thy right hand possesseth, of the booty which God hath granted thee; and the daughters of thy uncle, and the daughters of thy aunts, both on thy father's side and on thy mother's side, who have fled with thee from Mecca, and any other believing woman, if she give herself unto the Prophet, in case the Prophet desireth to take her to wife. This is a peculiar privilege granted unto thee, above the rest of the true believers. Thou mayest postpone the turn of such of thy wives as thou shalt please in being called to thy bed; and thou mayest take unto thee her whom thou shalt please, and her whom thou shalt desire of those whom thou shalt have before rejected; and it shall be no crime in thee."

I do not know in what way Syed Ameer Ali would explain away a passage like this, but certain it is that this and others like it which are to be found in the *Koran* had a terrible and most disastrous influence on the destinies of Islam. The *Koran*, as I have so frequently insisted upon, was held by the orthodox world of Islam, to be the very word of God, eternal and uncreated, residing as some of them would have said, in the very essence of the Deity. This gave to every precept in it an equally obligatory force; it placed on one and the same level the duties of the ceremonial laws, and the fulfilment of the decrees of the conscience. Out of this conviction arose that conception of the Deity, which throughout Islam has succeeded in well-nigh extinguishing every other—that which regards Him simply as a Fate whose moral laws are as purely arbitrary as his ceremonial. And in such passages as this from the *Koran*, in such acts as the massacre of the Banî Kuraizha, and the murders perpetrated at Medina, the

true believer found the evidence and the sanction for his belief. If that was right in Muhammad which was wrong in other men, it was clear that the moral laws which cramped and fettered men at every turn could not be an expression of the character, a manifestation of the essence of Him who made the world. He must be above them and independent of them ; and good and bad, believer and unbeliever were, so to speak, the results of a malicious caprice—arbitrary deductions from the sum of human enjoyment. “ Whomever,” says the Prophet, “ God shall please to direct, he will open his breast to receive the faith of Islam ; but whomsoever He shall please to lead into error, he will render his breast straight and narrow as though he were climbing up to heaven. Thus doth God inflict a terrible punishment on those who believe not.”

Syed Ameer Ali has other chapters which, but for want of space, I should have been glad to examine. From these I learn with considerable surprise, that the *Koran* abolished slavery, that Islam has never been aggressive, that the Muhammadan is remarkable for being the best man in the world, and that every conceivable blessing has flowed into Europe from Muhammadan channels. The reasoning by which all this is supported is truly wonderful. They do not, however, directly concern the character of Muhammad, and are therefore foreign to my immediate purpose. But enough I think has been said to show why Muhammad cannot be accepted by the West as even a particularly high type of humanity. The faith in Christ as the Son of God, some people hold to be waning ; but none will deny that belief in his humanity is on the increase. There was never a period in Christendom when the moral beauty of the character depicted in the four Gospels commanded a deeper or more affectionate reverence. But imagine how the light would fade away from the lineaments of Jesus of Nazareth, if we knew on authority that could not be doubted that He had ordered His Disciples to fall upon Judas and murder him as a manifest traitor ; that he had stood calmly by, an approving spectator, while two or three hundred Pharisees had been butchered in cold blood by his followers, and their wives and children reduced to slavery ; that while enforcing in His teaching the utmost purity even of thought, He had claimed for Himself, on the authority of a divine dispensation, unlimited license in act. Who in such a case would accept either Him or His teaching as the example of a godly life ? Even Syed Ameer Ali must, I should think, confess that no one would. I have no wish to “ vituperate the benefactors of humanity ” in the name of “ Christian charity.” But facts are stubborn things ; I have instanced only a few of those which leave an indelible stain on the fair fame and moral grandeur of the founder of Islam.

The Basis of Religious Faith.—Passing now from the con-

sideration of Muhammad's character, and accepting, for the sake of argument, that Syed Ameer Ali's conception of him is the true one, that he was really "one entire and perfect chrysolite," the noblest, grandest and purest man that "ever lived in the tide of times," and that the *Koran* is a work instinct throughout with wisdom and moral insight,—would even a general acknowledgment of these assertions constitute a sufficient basis for an enduring and progressive religious faith? We think not; and here it is that the Syed's reasoning so completely breaks down. His own faith in Muhammad and the *Koran* is, we suspect, of a much more orthodox and thorough going character than appears in the present work. This "critical examination" is a concession to the spirit of modern rationalism; an attempt to show that Islam also can endure and survive the most searching attacks of the (so called) "higher criticism." But in his eagerness to show this, the Syed has forgotten to inquire what is the only possible basis of a religious faith, and whether Islam handled in the free spirit he recommends, does not become a system of no greater authority than the philosophy of Herbert Spencer, Auguste Comte, or any other speculative teacher. What is Religious Faith? It is preëminently a feeling which is kindled by and attaches itself to certain conceptions of the Deity, which it believes God Himself to have communicated to men. It starts from the divine ground; the moment it can be shown that what Faith has believed to be a revelation of God, was in fact nothing but the guesses at truth of a human intellect working according to the ordinary laws of thought, religious faith perishes. Belief then becomes a purely intellectual matter, based exclusively upon the reason, not as in the case of religion on the whole inner-man, intellectual, imaginative, and emotional. History establishes this. There is no religion that has greatly moved the world, which has not claimed the allegiance of mankind on this ground, that it had come down from God. Certainly Islam did. The Prophet, by the repeated and express declarations of the *Koran* was regarded as the special favourite of heaven. "Verily" says Muhammad, "God and his angels invoke blessings upon the Prophet." And again, "Verily they that trouble God and His Apostle, God hath cursed them in this world, and in that which is to come: He hath prepared for them an ignominious punishment." The *Koran* was declared to be the thoughts and decrees of God, communicated to Muhammad by the angel Gabriel. These revelations extended over a period of three and twenty years. "The *Koran*," we are told, "could not have been composed by any except God. . . there is no doubt thereof; sent down from the Lord of all creatures." And in another place—"It is He who hath sent down unto you the book of the *Koran* distinguishing between good and evil; and they to whom we gave the scripture know that it

is sent down from the Lord with truth. Be not therefore one of those who doubt thereof." And this awful character attaches not merely to the moral exhortations of the *Koran*, but to every part of it. It is throughout the pure and absolute expression of the Divine Will. Here is indisputably a firm foundation for a religious faith of a kind. It silences argument and criticism. Of what avail is it to bring the reason to bear upon the enactments about marriage and divorce or to point out that women are thereby condemned to perpetual degradation? The Lord of the whole earth has declared that such are the correct relations between the sexes, with the alternative, if you do not like them, of being "broiled in hell fire." Of what use is it to complain that the ceremonies of the Pilgrimage are meaningless and absurd, or that the reverence paid to the black stone is a disgraceful concession to the old idolatry of Arabia; there is the old answer, "God has ordained it thus and not otherwise; if you prefer not to believe in the saving efficacy of these ceremonies, the other alternative is open to you,—you can be broiled in hell fire?" But, on the other hand, the Faithful would add, why think about the matter at all? Why trouble your head with things that are too high for you. Believe in God and His Prophet, and perform whatsoever they command you, and you become forthwith an heir of paradise, wherein are "agreeable and beautiful damsels, having fine black eyes, and kept in pavilions from public view." A faith of this kind cannot conduct men very far in the path of progress. It binds the whole of human life under the yoke of an iron necessity, and the present state of Islam is a convincing proof of its enervating and corrupting power. But to those who accept it, it speaks with a voice of authority; it is a revelation of God communicated by God to men. Precisely the same kind of reasoning has always been applied to the Prophet himself. An orthodox Muhammadan would never think of weighing him and his acts in the nice scales of a scrupulous conscience. He would think it impious to do so; whatever the Prophet did, becomes right *ipso facto*, whether it be the murder of a Medina Jew, or a scandalous intrigue with a Coptic slave girl, or the butchery in cold blood of a Jewish tribe. And if we grant his premisses, his conclusions are undoubtedly right. If God and his angels invoke blessings on the Prophet, what is man that he should presume to sit in judgment upon the actions of such an exalted being? But Muhammadanism handled as Syed Ameer Ali would have us treat it, vanishes away like morning mist until nothing remains. The pilgrimage to Mecca, the five daily prayers, the laws about slavery, marriage and divorce, so soon as they cease to be regarded as divine ordinances, lose all their binding force. The wild Jewish legends and old Arabic traditions which so plentifully encumber the pages of the *Koran*, and make it such weary reading to

the Western mind, would have to be carefully excised as, in the West at least, their retention would certainly give occasion for the irreverent to blaspheme. The revelations accorded to Muhammad regarding Ayesha, and the Coptic slave and his other wives, would also have to go. And in truth it is difficult to say what could be safely preserved, except the addresses setting forth the unity and majesty of God. But how changed would even these be, if men were asked to receive them, not as a voice proceeding out of the clouds and darkness that shroud the splendour of God, but merely as the speculative opinions of an untaught Arab poet. "A mere opinion" the *Koran* tells us, "attacheth not unto any truth." When therefore Syed Ameer Ali speaks of "the grand destiny which the religion of Muhammad has yet to fulfil in the world"—which we suppose means the conversion of the West—we wish he had been somewhat more explicit. The only conceivable reason for which the West would become Muhammadan, would be that Islam was a Revelation from God. Is the *Koran* then the word of God; and if so, where is the proof of it? If on the other hand it be not the word of God in the orthodox sense (and the Syed speaks of it throughout as the composition of Muhammad), it lacks the one element of persuasion which alone could have the power to convert a Christian into a Muhammadan. It does not and cannot speak with authority. And this remark brings me to what is more immediately the subject of my essay—CHRISTENDOM and ISLAM. Syed Ameer Ali has of course a good deal to say on this point, and it is needless to add, that under his handling, both Christ and Christianity come out very small indeed. All the little good that there is in the world has, according to him, flowed from Islam, and by far the larger part of the evil from Christianity. The greatest calamity it appears that ever happened to Europe was the terrible defeat of the Arabs at the battle of Tours, and the repulse of the Muhammadans when they besieged Constantinople for the first time. Had these events turned out otherwise, Europe would have become Muhammadan, arts and literature would have been accelerated seven hundred years, and there would have been no religious wars, or religious persecutions. Spain in particular would "not have become the intellectual desert it now is, bereft of the glories of centuries;" and "the reformation of the Christian Church would have been accomplished centuries earlier." "Islam," it appears, "introduced into the modern world civilisation, philosophy, the arts and the sciences: every thing that ennobles the heart and elevates the mind." From all which it is also plainly apparent that the Syed can, when it pleases him, write very pure and perfect nonsense. Christ he considers as far inferior to Muhammad both in the purity and grandeur of his life and teachings, and in the work He has accom-

pushed. But precisely as he has totally misconceived the spring and motive power from whence the religion of Muhammad drew its terrible aggressive force; and also when that force was spent, the nerveless, unprogressive apathy under which the regions of Islam are at this moment every where rotting into utter barbarism; so also has he failed to understand what Christianity is. He talks of Christ throughout as the Prophet of Nazareth; this, of course, is only natural; but he seems to have no perception that had Christians deemed him to be only such, there would have been no Christendom. Men and women did not submit to the axe and the stake for a Jewish prophet, but for an incarnate God who had overcome death and brought light and immortality into the world. Religious faith, in this as in all other instances, was awakened and sustained by a revelation (real or supposed, it matters not) direct from God and made by God. When men speak of the belief in Christianity as being on the wane, they mean that men are beginning to regard Christ simply as a prophet or teacher, and not as a divine being who, in revealing the secrets beyond the grave, spoke of that which *He* knew from personal experience.

A rational, enduring and progressive religious faith must possess both an objective and subjective foundation. Subjectively it must meet and respond to the spiritual needs and aspirations of humanity; objectively it must be laid on a firm basis of historical fact. All religions, except one, have broken down on either the one side or the other; and most commonly on both. It is natural that enthusiastic Muhammadans, like Syed Ameer Ali, should speak of Islam as still having a great destiny to fulfil; and it is possible that at some remote day, the decaying body of Islam may shake its limbs together under some fierce impulse of enthusiasm, and hurling them *en masse* on Europe, seek to recover, at the sword's point, the burning zeal and invincible force of its prime. Writers like Mr. Palgrave and others declare that the old fire is gradually awakening within the soul of Muhammadanism, and that Christendom may again have to repeat, in ventable earnest, the prayer to be delivered from "Jews, Turks, infidels and heretics." We utterly disbelieve these gloomy prognostications; but this at any rate is not "the grand destiny" which Syed Ameer Ali foresees in the future. Islam in his eyes is to become a grand regenerating Power, which is to embrace the Western world, not less than the East within the range of its influence. It is difficult to believe that even a devout Muhammadan, who has been in Europe, should cherish with any degree of conviction so chimerical a dream as this. There is about as much chance of the old Pagan mythology being restored, and of sacrifices being offered up to Apollo and Minerva. The question would never get so far as to be debated. The sunk-

ing down of the West into a condition of utter scepticism and religious indifference is just conceivable; the substitution of Muhammad for Christ is palpably ridiculous. The claims of only one faith, as a revelation from God, are yet held as matter worthy of debate, and that faith is Christianity. That the faith in Christ will eventually emerge from its present fiery trials more deeply rooted in the hearts and consciences of men, is my firm conviction. The present questioning and debating, which seems to many to be cutting out the very heart of it, are, in my opinion, only cutting away certain excrescences and outer coverings, which have hindered its full beauty and significance from appearing to the world. They are driving the Defenders of the Faith to seek for a foundation laid, so to speak, deep in the nature and life of man, which must therefore be as enduring as humanity itself. Unproveable assertions about miracles, inspiration, the authority of the church, and the like—assertions about which it is impossible to argue except in a circle—are becoming less and less frequent every day. Christ established his divinity by performing miracles. Yes, but how do you know that he did actually perform these miracles? Because the Bible says so. Yes, but how do you know that the Bible speaks truth in this matter? Because it is a divinely inspired book and therefore infallible. Yes, but how do you know it is divinely inspired? To this there is no response, except because the Bible is true, or because the Church says so, which only removes the difficulty a step further back. For if we ask whence the Church derived this authority, we must be told from Christ, and then the old weary round of question and answer must be trod again until we are brought round to our first starting point. Modern criticism has then done us the service to make this singular method of proving a position increasingly impossible. It has compelled the thoughtful Christian to seek for some more rational ground of faith than the *argumentum in circulo*. And it is not difficult to find.

The idea of a special Revelation accorded to the Jewish people is distasteful to Modern Thought (misled it must be admitted by orthodox Theology), because it seems to involve a perpetual miracle. Modern Thought sees clearly enough that the Jews, their Leaders, Kings and Prophets, were men of like passions with ourselves, liable to the same errors, subject to the same infirmities, and they ask what reason is there to suppose that these Psalms and Prophecies of theirs were produced by any miraculous process peculiar to themselves. They are quite right as Christendom is beginning to discover. There was nothing miraculous in the production of the Jewish writings—not "miraculous," that is in the modern scientific application of the term—no breach or infraction of the Order of Nature. Assuming that there is a God, He must

govern the world either in this way or in that or some other. Assuming that He had determined to make known to men the method of His moral government, and selected as His agents for this purpose a particular people, and opened their minds to receive this knowledge, there would be no breach in the laws of nature—nothing in any way more miraculous in the Jews' possessing this particular knowledge, than in any man or nation possessing any gifts or powers whatsoever which are not possessed equally by the whole human race. The question resolves itself into one of simple historical fact. Did the Jew possess this knowledge or did he not? We can see at a glance that the present advanced state of the Western world is not due to Jewish influences alone. The education of a world is a work many-sided; and there are vast regions of human activity which never came within the cognizance of the Jew. Man would be infinitely poorer than he is, if the gifts of Philosophy, Poetry, and Art had not been lavished upon the Greek, or if the capacity for government, and the sense of the majesty of Law had been withheld from the Roman. They all were divine gifts which have helped powerfully to "build up the being that we are." But it is manifest, from their whole history, that neither Greek nor Roman ever attained to a living and lasting conviction of a One God ruling the earth in righteousness, or as Mr. Arnold would prefer to put it of "an enduring Power, not ourselves, that makes for righteousness." The utter corruption that overtook their schemes of life is due to the lack of this conviction; and not only so, but wherever and at whatever time we examine the story of men, we find that nations have decayed and fallen back into barbarism just as they have ceased to believe in an "enduring power not themselves, that makes for righteousness."

This essential element then, in the growth of humanity, has been supplied by the Jew; insomuch that could we sever from the structure of Modern Thought all that it has derived from Jewish sources, the very belief in this "enduring power" would perish from among us. This is both illustrated and confirmed by the remarkable fact that where the literature of the Jews has not penetrated, the belief, as a practical guide to conduct, never has existed and does not do so at the present time. It is manifest, moreover, that the experiences of life do not suggest it as a matter of course; otherwise it would have been the common heritage of Assyrian, Chaldean, Greek, and Roman. Whence, then, had the Jew this knowledge which none of the nations of antiquity possessed—to the clear and perfect apprehension of which the Jew himself could never attain—and yet to forget which has been, as all history shows, the death knell of empires and dominions, the sure and certain precursor of utter decay. Is there any

answer possible, any answer conceivable except that the Jew was taught it by God? The æstheticism of the Greek, the practical ability of the Roman, the mora insight of the Jew, are all His gifts; but the last involves of necessity a clearer and more direct perception of the mind of the Giver. The first two are as though we should guess at a man's character through the medium of his works; the last as though we should *know* his character by direct contact with the man himself. In what way could it be expressed better or more truly than as a Revelation or Discovery of God? And so also with regard to the Incarnation. There is nothing miraculous, no infraction of the Order of Nature, in the statement that the Word of God took flesh and dwelt among men. Spring and Summer, Autumn and Winter were not thereby disarranged; all things in heaven and earth went on as they had done from the beginning; only God who had been partially manifested again and again in all the good and great men who had ever lived, revealed Himself fully in the form of a man. The Word of God who had been the light of every man who had come into the world was then made known in the fullness of His perfection. The point at issue is not a question as to the possibility of the miraculous, but one of simple historical fact. Can Christianity be accounted for in any other way? For if the New Testament History be true, the Incarnation, so far from being an infraction, must be a part of the Universal Order. Here, then, is that which modern criticism has effected for the faith in Christ. Hitherto we have been expected to swallow it, so to speak, in a lump and undigested, in virtue of a number of miraculous sanctions—miracles, inspiration, Church authority—which were supposed to act as a fence putting it quite out of the reach of irreverent criticism. But now, at length, it has been discovered that the fences derive all their strength from that which they are supposed to defend. They *may* be true, if Christianity be true; but they cannot be assumed to be true, and then used as arguments to prove the truth of Christianity. The very foundations of the Faith are now being assailed, and this I say is an advantage, because in no other way could the indestructibility of those foundations be adequately made known. The discussion has⁸ passed into the arena of facts. What has Christ done for mankind? Can generation after generation be led into an ever higher life, and fuller development, while their mental food from childhood is a gross and palpable falsehood? Do we find this progress in lands where Christianity has not been known? Does such progress generally accompany truth or falsehood? Such questions as these every one will perceive, cannot be pushed aside offhand by an *a priori* assertion that miracles are impossible and therefore Christianity must be a delusion.

The next great change that is being gradually effected by Modern

Thought is a right estimation of the evidential value of the miraculous. Until within the last forty years, miracles constituted the very cornerstone of the Christian Faith, with two almost equally disastrous results. If from any cause whatsoever any one became convinced that miracles were impossible, the whole fabric of Christianity, so far as he was concerned, came down with a run. During the eighteenth century this kind of scepticism abounded, and it could not well have been otherwise. Miracles proving Christianity, it was impossible that Christianity should render miracles authentic; the evidence of their possibility must be sought for elsewhere; and especially by an examination of the regular order of Nature. Now the recognised definition of a miracle was a break in the order of Nature; of course therefore such an examination *per se* could conduct to no other result than to an utter disbelief in the miraculous, and this feeling, we see, manifested in the Deism of that day. But even to those who experienced no difficulty in accepting the miracles of the Bible as historical facts, the undue prominence given to them had the effect of shutting out from their perceptions the moral beauty of Christ's teaching. Dreadful scholastic definitions of "Atonement," of "Justification," of "Original Sin" were accepted without hesitation, without an inquiry whether they did not outrage all the moral instincts of man. What matter if they did? God had manifested His omnipotence by a variety of wonderful and tremendous achievements, and the duty of weak humanity was not to argue and criticise, but to hear and obey. But Modern Thought has wrought here a great and most beneficial change. It has driven Theology to see that men cannot be policed and bullied into Christianity. It is the love of God, and not His power, which will alone avail to regenerate the world. Looking at the Bible records and the history of Christendom under this new light, the miraculous at once passes into that subordinate position befitting it. We found above that a special Revelation of God having been granted to the Jews is established by the fact that they actually did possess this intuition. The Jewish Psalmists and Prophets, and in a less degree the entire nation, were inspired and bound together by this awful and abiding consciousness of God in a wholly unique and exceptional manner. But in all other respects they were made of precisely the same clay as ordinary humanity, subject to the same errors and infirmities, and liable to the same intellectual delusions. Consequently if we cut out, as pure legend, the entire miraculous element from the histories of the Old Testament; the "God-consciousness" (as the Germans would term it) which is the important fact for us, would remain as true and significant as ever. For this last is a fact guaranteed to us by the actual present preservation of poems and prophesies whence it speaks forth in every line; the (so-called) "miracles" are merely the means

whereby the Jews believed themselves to have attained that knowledge—a point on which they might easily have been mistaken. Put an analogous case. A man has come to the knowledge of a certain fact, which he can state clearly and accurately, and which is capable of being verified ; but when pressed to give an account of the process whereby he grasped this fact, he gives one which is manifestly vague and erroneous. Does this invalidate the fact ? Assuredly not, for that as we have said is capable of being verified independently. It only shows that the man does know the one thing, but does not know the other. The moment a man apprehends this distinction and all the consequences that flow from it, the miraculous portions of the Old Testament become so many statements of fact asserted by old historians, the examination of which he is ready to undertake in the same dispassionate frame of mind as of similar statements in Herodotus. But what then is the attitude of mind which a thoughtful man should assume regarding the miracles of the Old Testament ? Are they facts, or are they only myths ? The question is one which cannot be answered offhand ; which will be answered in different ways by different people. I will try to explain my own position.

The consciousness in the Jew that God was about his path, and about his bed, and spying out all his ways, had the inevitable result of making him either apprehend—or imagine that he did so—the direct interposition of the Almighty in everything that befel him. It is plain that a habit of mind like this, in a rude untutored age that had never learned to *interrogate* Nature, was the exact soil on which a crop of miracles would be sown and fructify in almost unlimited abundance. Legends would grow up plentifully and be easily accepted which told of any striking illustration of God's especial favour for his chosen people ; and there are many stories recorded in the Old Testament which, to my thinking, manifestly bear this legendary character. The passage of the Israelites into Canaan, dryshod over the Jordan ; the fall of the walls of Jericho ; the miraculous feats recorded of the prophet Elisha, seem to me to be stories of this kind. The staying of the sun and moon was, I fancy, originally intended as nothing but a poetical fancy ; it was converted into concrete fact in the transfer from the Book of Jasher to that of Joshua. But there are other stories in the Old Testament which are records of facts that actually happened, and only interpreted in a manner alien to modern thought. A miracle it must be remembered in the mind of a Jew, was not an infraction of one of our (so-called) laws of Nature. He knew nothing about these ; it was simply a *sign of God's presence*—that is, it was addressed to the *mind* and not the eye of the beholder. Its significance resided in its subjective power over the soul.

Take by way of illustration the *sign* of the Burning Bush. Modern Thought reading this story at once exclaims, "This is absurd; the property of fire is to burn and consume whatever it touches; what therefore Moses beheld could not have been a bush actually on fire, but an optical delusion." Granted. But why should not God employ an optical delusion as the means of producing a conviction of His presence? "Abu Ali al-Fudail, a celebrated ascetic and one of the *men of the path* drew his origin," we are told by the Arabic biographer, Ibn Khallikan, "from a family of the tribe of Tamim, which had settled at Tālākan. He commenced his life as a highway robber and intercepted travellers on the road from Abiward to Sarakhs, but his conversion was operated by the following circumstance. As he was climbing over a wall to see a girl whom he loved, he heard a voice pronounce this verse of the *Koran*, 'Is not the time yet come to those who believe that their hearts should humbly submit to the admonition of God?' (*Sura* 57 v. 15). On this he exclaimed, 'O Lord that time is come!' He then went away from the place and the approach of night induced him to repair for shelter to a ruined edifice. He there found a band of travellers, one of whom said to the others, 'Let us set out,' but another answered, 'Let us rather wait till daylight, for al-Fudail is on the road and will stop us.' Al-Fudail then turned his heart to God, and assured them they had nothing to fear. He ranked amongst the greatest of saints." The verse of the *Koran* which thus converted, as if by magic, a robber into a saint—can it be described in any way so truly, so accurately as that it was to him a *sign of God's presence*? The bright light which shone round about Saul as he journeyed towards Damascus may or may not have been a miracle in the modern signification of the term; it is impossible to say whether it was or not, and it is utterly unimportant. It was to the future apostle, a *sign of God's presence*; and as such it became the turning point of his career, and one of the mightiest and most far reaching events that are to be found in the entire history of Christendom. The sign of the burning bush is an exactly analogous instance. The exile from his own people, brooding over their wrongs and sufferings in the silence and solitude of the desert, must often have re-called the promises made to Abraham. The future Founder of a nation, rich in all the learning of the Egyptians, endowed with strength and courage and wisdom, must often have had within him an eager desire to lead forth his down-trodden fellows to the Promised Land. Could it be possible that God might have predestined him for the accomplishment of this glorious task? If so, He would surely vouchsafe him some *sign* of His presence and aid? His thought appears to meet with a response. He sees the bush that burns with fire and is not consumed; he hears a

voice commanding him to undertake, in full assurance of success, the mighty work he had been brooding over. Of what importance is it to us to gauge the exact scientific value of this vision. What matter whether the burning bush were an objective fact, or simply a subjective and purely personal experience. Moses, we may rest assured, did not weigh such nice points; he accepted it as a *sign of God's presence*; and the result proved him to be right. Had Moses failed in his endeavour; or had he never attempted the deliverance of his people, the vision of the burning bush would have been to us an optical delusion and nothing more. But when we know it to have been a critical epoch in the history of the world—an event fraught with illimitable consequences—it becomes, not the less an optical delusion—if we are bound to translate the language of the Bible into the scientific jargon of the day—but one sent for a particular end, informed with a divine purpose, serving and intended to serve as *a sign of God's presence*. The ten plagues of Egypt, the passage across the Red Sea, the three days of pestilence that humbled the pride of King David, were all miracles which would be much better described as “signs of God's presence.” Probably all three, and certainly the last two were due to purely natural causes, but not the less God made use of purely natural phenomena to work out great moral ends. And does He not continue to do so still? Have not war and famine and pestilence, and tremendous natural catastrophes been accepted in all ages and by all nations as the signs of God's anger, recalling humanity to a sense of the duties laid upon them? Do not peace and plenty, exactly as of old, make us feel that there is one who “sendeth rain and fruitful seasons filling our hearts with joy and gladness?” They are signs of God's presence to us; they were nothing more to the Jews.

The Jew knew nothing about secondary causes; he drew no distinction between the natural and the miraculous; God with him was all in all. God it was who came walking upon the wings of the wind; who covered himself with light as it were, with a garment, and stretched out the heavens like a curtain. God it was who had made the world so fast that it could not be moved who sent the rain and the thunder, the storm and the sunshine. And hence the sign of the Burning Bush, which led to his deliverance from Egypt, was also a sign of His presence; the plagues which humbled the haughtiness of Pharaoh; the storm that destroyed his army in the waters of the Red Sea, were alike the work of God. If you had asked him whether they were brought about by natural or supernatural causes, he would have attached no meaning whatever to such an inquiry. God had delivered his people, that was all he knew. God had stretched forth his arm over the river of Egypt, and the waters had become

as blood; God had "caused the sea to go back by a strong, east wind and made the sea, dry land;" but the terms "natural" and "miraculous" belong to a jargon which had not then come into existence. It was the *fact* of deliverance that impressed the Jew; not the physical conditions under which it was accomplished. There is, I admit, a considerable quantity of legendary matter in the Old Testament which cannot be made subject to this principle. For example, it seems to me impossible to regard the dialogue between Balaam and his ass otherwise than as a myth pure and simple; not only is it utterly incredible, but it is meaningless and irrelevant, a manifest interpolation which destroys the continuity of the story. Other incidents such as in the contest of Elijah with the priests of Baal the fire that came down from heaven and consumed the sacrifice, are either pure miracles or pure myths; they cannot be explained away as merely natural phenomena, interpreted after a manner peculiar to the Jews. Their authenticity or otherwise will depend very much on the frame of mind which a critic brings to their examination. But here too, in order to correctly estimate their significance, we must bear in mind that they are parts of a whole—incidents in a grand national drama, gradually unfolded from the call of Abraham to the return from the Captivity. During all this long period we are witnesses, so to speak, of the history of an idea—the idea of a One God ruling the earth in righteousness; gradually detaching itself from polytheistic and anthropomorphic elements, until it acquires an undisputed ascendancy over the Jewish mind. This it is which gives its special unity to the Old Testament writings. They may be read as a grand epic poem which recounts the long contest between the many gods and the One—Isis and Dagon and Bel and Ashtareth and Moloch, against the God of Abraham and Isaac and Jacob—resulting in the ultimate victory of the One. What judgment we pass on the objective reality of the incidents of this tremendous contest will depend mainly upon the judgment we have come to regarding the objective reality of the contest itself. Was it an actual veritable struggle between spiritual powers of good and evil, or only a shadow-fight projected from the too active imagination of the Jew? If the last, then we may be certain fire never came down from heaven at the bidding of Elijah. But if Elijah was in word and in fact, the servant of a Living God, the story ceases at least to be incredible on *a priori* grounds. The questions then to be asked are—1, Does the story, as related, bear the impress of veracity? 2, Was the end to be obtained sufficiently great to justify the means? From my stand-point both questions would be answered in the affirmative. The history of the Jews too, it must be remembered, commences with the call of

Abraham, and not with the story of the Fall. But commencing from that point, I think that with the aid of this simple principle—that a miracle to the Jew was not a breach in the Order of Nature, of which he knew nothing whatever, but “a sign of God’s presence” to be tested by its effects upon the mind—the “miraculous” difficulties of the Old Testament may nearly all be surmounted without questioning the veracity of the writers or destroying the moral significance of “the sign.” It is manifestly absurd to expect that a Jew of that period will record and describe natural or other extraordinary phenomena with the scientific caution and precision of a Huxley or a Tyndall.

So much on “the miraculous” as recorded in the Old Testament. But it is clear that the miracles of Christ cannot be treated in the same manner; either they were objective realities or they were nothing at all. What then, in the face of Modern Thought, is the position we must take up here. On this subject, the first point worth noting, as it seems to me, is that none of the acts recorded of Christ are of that nature that if accomplished, they would need the whole solar system to be thrown out of gear. They are mostly acts of healing which derive their miraculous character not from their inherent impossibility, but from the absence of secondary agencies in effecting them. The feeding of the five thousand, the raising of Lazarus, and the Resurrection, do not come under this category; but these likewise are, if we may use the expression, detached events having no far-reaching ties with the whole system of things as would have been the case, had Joshua really stayed the motion of the sun and moon; or if the sun had really gone back fifteen degrees on the dial of Ahaz. They do not disorganise nature; they work no consequences outside of themselves; they only contradict experience. Of course they, as well as all things else recorded of Him, are utterly incredible if Christ was only a man; but if the Lord of all life, physical and mental, was to be revealed to the world; if the consciousness of Immortality was to be impressed upon men, they become the most natural and fitting means for accomplishing those ends. Now, no one acquainted with the Epistles of the New Testament would be hardy enough to assert that the early Churches adopted Christ as their ever present though invisible head, knowing Him to be nothing but a man. St. Paul writing to the Romans says that he is entrusted with “a Gospel of God concerning His Son, Jesus Christ, who was made of the seed of David according to the flesh, and declared to be the Son of God with power by the Resurrection of His dead limbs;” and this mode of regarding Christ is common to all the Epistles. They establish the fact that from the very birth of Christendom, Jesus of Nazareth was regarded as the manifestation of God in a human form, and that the proof of this rested

upon the belief in His Resurrection from the dead. And if we look along the whole history of Christendom, we shall find it one unbroken testimony to St. Paul's assertion that "if Christ be not risen from the dead, then is our preaching vain and your faith is also vain." The ethics of Jesus of Nazareth, apart from this belief in His divinity, would have availed nothing; men and women clung with invincible faith, not to a moral teacher, but to the incarnate Son of God who had entered into the state of death, had grappled with that—the universal irresistible enemy of man—and had overcome it. They could endure the worst which tyrants and persecutors could inflict on them because, since the entrance of Christ into the state of death, and His Resurrection thence, there no longer stretched beyond the margin of the grave a dim land peopled with strange and fearful shapes, but "a heaven from which there came and ~~could~~ come nothing but light and blessing to the earth." The miracle of the Resurrection may then be said to be the cardinal fact, the very corner-stone of Christianity. If the evidence breaks down here, no internal beauty, no adaptibility to the moral needs of Humanity, can preserve the faith once delivered to the Apostles from being treated as an imposture or delusion. They erected it on this foundation, and if that be removed, the superstructure necessarily tumbles into ruin. On the other hand if this fact can be established on a firm and solid basis, even a professed sceptic would have little reluctance in receiving as objective truths the other miracles recorded in the Gospels.

The relation in which the Epistles stand to the Gospels is often unwittingly overlooked, and long trains of argument are built up due mainly to this omission. The Gospels are handled as if they had built up the early Christian Churches, and the Epistles had come after them. The exact opposite is the truth. The Epistles are specially valuable as giving us in a form altogether beyond suspicion the fundamental beliefs of nascent Christendom, almost immediately after the death of Christ. The incidental notices of Jesus scattered through them are in perfect harmony with the portrait drawn for us in the Four Gospels; the great salient facts of Christ's life and death are, nearly all of them referred to in language devoid of ambiguity; and Gospels and Epistles, so far as they cover the same ground, illustrate and confirm, but never contradict each other's statements. The Gospels again, whether historical or not, are manifestly the work of earnest seekers after truth. None but men who felt to the uttermost the beauty of holiness and charity and strove to manifest it forth in their own lives, could have delineated "the Saviour" of the Evangelists—a fact altogether incompatible with at least wilful imposture. In truth, even in the present age of scepticism and criticism, their narratives would be credited without hesitation, but for the intermingling of "the miraculous."

But if it can be shown that the most stupendous miracle of all recorded by them is testified by an abundance and variety of evidence, which can rarely be accumulated round any historical fact, then *a fortiori* the lesser miracles become stripped of their incredibility. If we can accept the Resurrection, with as much assurance of certainty, say, as the Battle of Waterloo, we should have no difficulty in believing the miracles of healing, the casting out of devils, and the like.

We find, then, that immediately after the death of an obscure Galilean preacher, a society rose up in the heart of the Roman Empire claiming Him as their divine though invisible Head, and appealing in confirmation to the fact of His Resurrection. This Society, unlike those nurtured upon ordinary superstitions, does not become a gloomy intractable fanaticism which merely agitates without purifying the world in which it exists. Without material force, it simply wins its way by the persuasive power of a high ideal presented before the minds of men. From the evidence of its literature we find that among its first and most devoted adherents were men of profound thought, and the most beautiful and elevated spiritual capacities. They rank to this day as among the greatest moral teachers of all ages. We find that this belief in a Resurrection nerves slaves and weak women to endure without flinching the most terrible tortures; and we see finally that during a period of eighteen centuries, it has reigned with increasing power over the minds of men, but acting throughout as an incentive to all progress. The first thing, then, I would ask: Is there anything akin to this in the history of the world? Do false superstitions lead to these admirable consequences? In the case of broken down religions can we not, with ease, disengage the good from the bad? Do we not all say that that which led men to higher levels of life was good—that which tended to lower and corrupt them, was bad? And is it not the merest truism to say that the one was good because it had truth in it, and the other bad because it had not? Without this belief in a Resurrection the very foundation and vital sap of Christendom would have been lacking—Does it accord then with human nature to believe that it puts forth its loveliest blossoms, and yields its choicest fruits when fed upon a lie?

“But the actual accounts of the Resurrection”—say some—“How are we to believe these? The details differ so much from each other that any attempt to reconcile them is futile.” What of that? We do not disbelieve the fact of the Battle of Waterloo because there are utterly hopeless discrepancies in French, English, and Prussian accounts of it. They are all at one as to a great battle having been fought, and that is sufficient to establish the central fact. Nay, in this matter of the Resurrection,

the discordant accounts given in the Four Gospels immeasurably strengthen the evidence for the event itself. Had they agreed in every particular, the result would certainly have been deemed a concerted forgery. The four accounts as we have them, are utterly free from a suspicion of collusion; and show, therefore, that the belief was universal in the early Church. It was only natural and indeed inevitable that in the widely scattered early Churches, where the means of intercommunication were scanty and difficult, there should be differences of detail in the collateral circumstances that attended the great central fact; but they cannot invalidate *that*—rather as I have already said, they multiply the evidence in proof of it.

This belief, then, in the first instance must have been propagated by the Apostles. If not the statement of a fact, it must have been either a conscious imposture or a mere delusion of the imagination. The theory of “conscious imposture” may be dismissed without discussion. All reasonable critics are agreed that conscious liars could not have laid the foundations of Christianity. There remains, then, that of an “imaginative delusion.” Nothing that I can say is likely to detach any one from this theory who has already embraced it. There is a credulity of scepticism which is not less irrational than the credulity of superstition; but I will point out the huge weight of probability that tells against it. Even an imaginative delusion must spring from some root; and in the present case it could have been only one of two. The Prophet of Nazareth may have been a man precisely as the Four Gospels have depicted, asserting himself to be the long promised Messiah of the seed of Abraham in whom all the generations of the world were to be blessed, exhibiting at once His power over the world and His love towards mankind by a series of redemptive acts—triumphs over disease and misery and sin—informing the minds of those who heard Him with a new moral life; predicting His death upon the cross, but declaring at the same time that this—His seeming defeat—would really be the commencement of His conquest over the powers of the world; that on the third day He would rise from the grave, and that from that hour, a Spirit would proceed from Him, which slowly but surely would penetrate the obdurate heart of man, and make a new heaven and a new earth. The fierce, capricious and lustful deities of the old Pagan mythologies would be re-placed by One who out of His tender love towards mankind suffered death upon the cross; the principle of self-love would be re-placed by that of self-sacrifice; the worship of power by that of love. If the Prophet were really a man such as this, then the belief in His Resurrection might, perhaps, have been the imagination only of loving minds; but then it is manifest also that in such a case it would have been

such a perfectly natural and even inevitable sequence to his foregoing life that a very slight amount of evidence—far less than is preserved in the annals of the early churches—would suffice to transfer it from the sphere of the imagination to that of history. But those who reject the credibility of the Resurrection do so on the *a priori* impossibility of miracles, and they reject along with it all the miracles recorded in the Gospels from beginning to end. In their eyes Christ is merely a moral teacher, who was executed as a criminal; and the halo of divinity which is cast around Him in the new Testament Epistles not less than Gospels—they interpret as the affectionate yearnings of the heart investing the object of Love with all the attributes it would desire it to possess. According to this theory, there was nothing in the life of Jesus of Nazareth to justify the supposition that He would rise from the dead. The belief was due solely to the too eager imagination of His disciples. Now, if there is one fact which comes out in the Gospels more clearly than another, it is that the Apostles were totally destitute of imagination. They never rise above the level (intellectually) of ignorant Galilean fishermen. Their Master's mission, and His sublimest precepts are consistently translated by them into the most earthly and thoroughly material equivalents. They look forward to His becoming a great worldly potentate; they behold themselves in anticipation the chief favourites of an Oriental despot, and quarrel for the places to the right and left of His throne; they are filled with sore dismay when He speaks of his ignominious end; and are simply bewildered by the obscure hints that He will rise again. When He was arrested they all forsook Him and fled; when He was dead they accepted it as the final crushing of their hopes; when told of His Resurrection, "the words appeared to them as idle tales and they believed them not." These men, it is plain, were altogether honest and truthful or they would not have left behind them such candid and unflattering portraits of themselves; but no one will deny that they could not have possessed a single spark of Imagination. To credit them with having first imagined the story of the Resurrection, then believed in it with such intensity of conviction as to undertake the enterprise of building up a world-wide Faith with this dream as its foundation; and finally to have evolved an image of their Master so perfectly, in harmony with this central tenet that we have the Four Gospels as the written record of their preaching, is a demand on human credulity which only modern scepticism would have dared to make. It would, if true, constitute a greater miracle than the Resurrection itself. Granted that Christ did rise, and that His spirit did inform and elevate the minds of his disciples, and the marvellous transformation that came over them is accounted for by an adequate cause.

Deny the Resurrection and Christianity becomes like a rootless stick planted in a waste of sand, which nevertheless becomes vaster, mightier, and more enduring, than all the trees of the forest.

Few, however, of those who reject Christianity care to examine with any thoroughness the chain of historical evidence that knits together the religion of Christendom. It is a task tedious and laborious in the extreme, and men prefer to believe upon trust that English theologians are profoundly ignorant, except Bishop Colenso to whom it has been given to destroy the Pentateuch utterly; and that Germans, who—also upon trust—are credited with inexhaustible learning and an unerring critical acumen, have proved the Bible to be myth from beginning to end.* Their alienation from Christianity is due to some statement of its leading doctrine revolting to their moral sense, which has been impressed upon them when children, or enforced in later life with terrific threats by some injudicious preacher. But in no department of theology have the enlightening and purifying influences of Modern Thought operated with more marvellous results than here; and it is in the great and thorough reformation which the dogmatic system of Christianity is under process of undergoing that I rest my faith in its permanent power over humanity. So long as the foundations of Christianity were sought for in something not essentially moral—such, for example, as the power of God manifested in the achievement of prodigies, or an Infallible spirit ventriloquising through the passive minds of Psalmists and Prophets—the moral contradictions involved in scholastic systems of theology were, as we have already said, held to be of comparatively small moment. Christianity was boldly held to be a set of commands from God proved by miracles, and enforced by frightful penalties; if in the face of all this any one chose to reject it on the score that it offended against his conscience, that was his look out. He knew the consequences. We do not mean to say that any one ever did or ever could become a Christian driven thereto by a panic at the thought of hell fire. The extraordinary inconsistency of the mind enabled human beings in all ages to believe at one and the same time in the everlasting love of God, and His everlasting wrath against those who had sinned; just as numbers of devout people have held slavery to be in exact harmony with the precepts of Christ. But a time comes when men as

* In this connection I may, perhaps, be permitted to refer to another article of mine published in this *Review* about nine months ago—"The true test of a Revelation." It is only a col-

lection of hints, but even as such it may suggest the line of inquiry which ought to be taken by any one examining the historical proofs of Christianity.

though by magic, awake up to a sense of the error that has so long been hidden from them, and then, like Othello,—

Not poppy nor mandragora,
Nor all the drowsy syrups of the world
Will ever medicine them to that sweet sleep
Which they owed yesterday.

Such is it now. The fetters of scholastic theology have been broken; the old dogmas so formal, precise and business-like, seem all at once to have collapsed, and it appears to be in any one's power to make the shifting cloud, called Christianity, assume what shape he pleases. So we find the authority of Christ appealed to to establish every variety of Faith, from the infallibility of the Pope, away to the vaguest and most shadowy Theism; and people think as they listen to the Babel of tongues that the power of the Teacher of Nazareth must be passing away, not reflecting that this universal appeal to His authority is a conclusive testimony to the breadth of His teaching and the depth to which it must have probed the human heart. The change that is passing over Christian theology is the putting of a living soul into the dead bones of dogma, the transforming of formal propositions in divinity into the exhibition of a Power actually and sensibly engaged in the redemption of Mankind from evil. A few paragraphs will suffice to shew this sufficiently for our purpose.

The story of "the Fall" as related in the second chapter of Genesis has succumbed, or is fast doing so, under the assaults of scientific discovery and a more searching Biblical criticism. We know now that the appearance of man upon the earth ascends into an antiquity infinitely more remote than was contemplated by the writer of this Eastern Apologue; while the latest critical inquiries tend to establish that the story itself is of Babylonish origin, and appropriated by the Jews during the Captivity. Whether this be so or not, few people now-a-days think of quoting Adam and Eve and the talking serpent, as a proof of a primal fall or the need of an atonement. They have been driven to seek for its evidence, not in an Oriental parable of doubtful origin, but in the very nature of man; and there they find the story written in characters which those who run may read. Is man in the state in which he *ought* to be? Or is it not the fact that the voice of conscience is continually reminding every one of us, that we are continually transgressing, moral laws we are made to obey? Can man do the thing that he would? Or is not the experience of St. Paul, an universal one, that to *will* is present with us, but the *power* to do that which we would is absent? Do not we all see in the innocent guileless faces of children, an image of what our minds should be; but is it not a sad but incontrovertible truth that from the first moment of our birth

all the evil that has been done before us, weaves its meshes around us, and gradually drains us dry of that early purity and joyousness? There are men, it is true, who fight against this universal enemy with some measure of success; they ascend to higher levels of existence than the crowd below; but here again is not Paul's agonised entreaty to be delivered "from the body of this death," an universal experience? And are there not many more who become the willing slaves of the evil influences about them, and steadily, as the saying is, "go to the bad"? Or if we take a larger outlook, does it not become daily more and more apparent that war and pestilence and famine, are the results of human selfishness, human ignorance, and human indolence? Do not all the poverty, and wretchedness, and disease and filth abroad in the world, which we are so pitifully powerless to remedy, shew that humanity has fallen into an utterly chaotic and disorganised condition? Man cannot remedy or remove this vast accumulation of evil and error, for as we have just been compelled to admit, he is incapable of elevating even his single self to his own ideal of what he should be. If he cannot effect this in a single instance, it is manifestly absurd to suppose that he will ever effect it for the world at large. Thus we are led to see that the Christian doctrine of a "Fall of Man" does not in the smallest degree depend upon the story of Adam and Eve. It merely asserts a patent and terrible fact, that men have fallen into a *wrong* state, and lack the ability to bring themselves into a *right* one.

Out of this *fact* springs the need of an atonement,—in other words the need to be brought into harmony with the Creator. Here again, thanks to Modern Thought, we have nearly succeeded in getting rid of Shylock-like explanations of the Atonement—legal transactions with a wrathful God who must have His pound of flesh if not from this person then from that—and have commenced to build upon the sure broad ground of human nature. It is, simply, a matter of fact, that, in all ages and among all people, the seemingly invincible power of evil has caused men, in a variety of ways, to regard it as a Divinity. Sometimes they have thought of it as a coequal principle with that of good; sometimes they have called it Fate; sometimes, as at the present day, the tendency is to regard man as only a cunningly contrived piece of mechanism which turns out what is called "good" or "evil" according to the manner of its inner construction. It is plain that any one possessed by any of these beliefs, cannot enter heartily and confidently into the battle against evil, whether it be that within him or that in the world without. Whenever, as in India or the regions of Islam, the belief in Fatalism becomes general, stagnation ensues; followed at no distant interval by a constantly increasing moral and intellectual imbecility. The

only possible method of escape is to bring man to a right understanding of the order of things—in other words to set him *at one* with the Creator of the universe. Does God hate evil? Is He determined to eradicate it from His universe? Are men bound over to commit evil, whether they like it or not? Or is there a Power working on their side, stronger than the evil that is working out their destruction? To get at the right answers to these torturing doubts—in other words *to know God*—constitutes the doctrine or rather the fact of the Atonement. “God,” says St. Paul, “was in Christ, *reconciling the world unto Himself*,”—dispelling that is, the false beliefs about Him, by the manifestation of His real character. I am not asserting that He actually did so; that can be decided only by an examination of the historical evidence; I am only pointing out here that the leading doctrines of Christianity are based upon the deepest needs of human nature, and perfectly harmonise with the teaching of conscience.

From the doctrine of Atonement we pass naturally to that of Sacrifice. Here again, thanks to Modern Thought, we have shaken ourselves free from Mediæval Theology with its dreadful theories of a God who had made up His mind to destroy mankind, but forewent this amiable intention upon receiving an equivalent in the execution of his own sinless Son. We have got rid, I say, of all this; and with no glamour before our eyes, have come straight to the New Testament to find out what the life and death of Christ actually means. The professed object of Christ's life and death was to work out the salvation of man in a two-fold manner—by the revelation of God in the fullness of His perfect Love, which constitutes what is known as the Doctrine of the Atonement—and by the illustration in His life and actions of the principle of conduct which ought to govern the relations of men with each other—in other words, the principle of self-sacrifice. It is a poor and mutilated conception of “salvation” which regards it as the future transfer of the fortunate recipient to some divine land flowing with milk and honey, and it runs counter to the direct declarations of Christ, “*The Kingdom of God is within you.*” “*This is life eternal (i.e., salvation) to know the only true God, and Jesus Christ whom He has sent.*” Salvation constitutes a certain particular condition of mind; when a man is brought into a *right* state, so that he obeys spontaneously and without effort the voice of conscience enlightened by Christ, he is saved; and just so far as any of us accomplish this, we enter into eternal life even here in this present world. The law of conduct, Christ teaches both in word and act, whereby alone we can approximate to this “salvation of the soul,” is to sacrifice ourselves for the good of others; love is the strongest power in the world, and through it alone can the families of men ever be united into

one. "I," says Christ, "if I be lifted up will draw all men to me," meaning that the crowning sacrifice, which shrank not from the cruel death of the cross in its earnest zeal for the elevation of humanity, would speak to future ages with a voice of power that would penetrate the most obdurate heart. The death of Christ is not a means of averting from men the wrath of God, but the crowning illustration of the Law of Love which alone has the power to deliver them from the bondage of sin into the glorious liberty of the children of God. And did not Christ speak truly? Has not that pure and perfect human life which closed upon Mount Calvary drawn all men towards it? Has it not been to all the centuries since, the example of a godly life—the embodied idea of humanity?

But if the world is to be regenerated and men brought into a right state, it is not enough though God should actually descend from the skies and make known what that right state is. Man has fallen under the bondage of sin; and he needs a Power higher and greater than his own to liberate him from its fetters. The simple exhibition of a right state cannot remedy his inherent incapacity to reach up to it. Christ acknowledges and provides for this weakness. He promises that after His departure, His spirit will remain among men to provide that strength and inner illumination that would otherwise be wanting. Is not this precisely what has happened? If we shake ourselves free from theological definitions and look facts in the face, is it not strictly true—a truth that every one, Christian or Sceptic, would cordially acknowledge—that for the last eighteen centuries the Spirit of Christ has been moving over the face of our Western world, and subduing all European thought—more or less—to the likeness of its own image. It is "the Spirit of Christ" that has abolished slavery, mitigated the horrors of war, made the relief of the poor and destitute an imperative duty on those that have abundance; sanctified domestic ties; and leavened the thought of Europe to a degree immeasurably greater than the acts. Here again the Christian makes no demand on *the faith* of the Sceptic; he only points to a vast number of historical facts which are patent as the sun in heaven.

* Thus have we been led up, step by step, to what is known as the great mystery of "the Trinity in Unity;" but if, forgetting for a while Athanasian Creeds, and similar bewildering documents, we investigate the idea of God set forth in the New Testament, we shall find ~~there~~ that nothing more is affirmed of the Triune nature of the Deity than each of us may verify by his own experience. Every man is a Trinity in Unity. There is firstly, the man himself, who may direct his mental and physical energies in this direction or in that exactly as he pleases; there is secondly, the *word* that proceeds forth from him—in other terms his character, the work he does in the world, the impression good or bad that he leaves upon his

fellows ; and there is finally the spirit of the man, which binds together the man, his character, words, acts, and thoughts into a living unity. The man, his life, and the spirit in which he lives, can never be confounded together by the most unpractised metaphysician, and yet cannot be thought of as being otherwise than one. What the Bible affirms is that man is made in the image of God, and consequently that in God we find that archetypal "Trinity in Unity" which is nevertheless reflected in each one of us. God is the Creator of the Heavens and the Earth ; the Word who took flesh, is the perfect manifestation of His character ; the Holy Spirit is the living power that unites them ; and these three are One.

R. D. OSBORN.

ART. VI.—RIFLED ARTILLERY.

A Paper for the General Reader.

SCARCE a week passes but that interesting person "the general reader" finds the columns of his English newspaper more or less taken up by some question of artillery. He finds, for instance, a description of a "Field day at Shoeburyness," where all the novelties of the past six months are exhibited to a mixed company of Officers, naval and military, British and Foreign, Inventors, Amateurs, Contractors, &c. The description is generally in considerable detail; as few technical words are used as possible, and the results are portrayed with all the word-painter's skill. The description is often supplemented by the wood-cuts of the *Illustrated London News*. Despite these modern advantages, "the general reader" finds himself incapable of comprehending with any satisfactory degree of clearness what he has read; and were he to attempt to convey a notion of the new ideas which have entered his head to another person, he would find himself utterly at a loss. He may have inspected guns great and small, and perhaps have seen them fired; he may be a sportsman, or a volunteer, and have a certain knowledge of small arms; but of the principles involved in rifled artillery, he knows nothing. He may read discussions on the respective merits of breech and muzzle loading in great guns, treated with an ardour and vigour of language worthy of a theological controversy; but beyond learning that there is a good deal to be said on both sides of the question, he can form no intelligent opinion of his own.

It is purposed in these pages to give such elementary notions of rifled artillery as shall place the intelligent "general reader" in a better position to comprehend a somewhat abstruse subject. No technical words shall be used without an explanation, and every effort shall be made to put what we may have to say in what is called a popular form. Nevertheless, we shall have often to call upon him to use his mind's eye and to attempt to penetrate where no human eye can see. The scientific artillerist will hardly find the perusal of our pages either interesting or profitable.

If the reader will accompany us while we consider the nature of a smooth-bore gun, he will be in a better position to comprehend that of a rifled gun. A smooth-bore gun is, essentially, a strong vessel in the form of a tube closed at one end. It is attached to a carriage of a convenient height and of a form suited to the nature of the service it has to perform. The gun is capable of having its bore directed

above or below the horizontal plane through the trunnions* ; and further of being retained in any given position of elevation or depression while the gun is fired. The bore is a smooth cylinder into which is introduced, first the cartridge containing a suitable charge of powder, and then the cast-iron spherical or "round" shot. With a very little thought we can convince ourselves that when the powder charge is exploded the force of the gas at the instant of explosion will be at a maximum immediately about the seat of the powder and shot ; we are then led to the obvious conclusion that the thickness of the metal of the gun towards the breech should be greater than that at the muzzle. This consideration alters the external form of the exterior of the gun from a pure cylinder, the form we shall have conveyed by using the word tube, to a truncated cone, or to a tube with a stout jacket on it towards the breech or closed end.

At the moment the charge is lighted, the gunpowder does not flash instantaneously into white-hot gas ; but the burning of the grains is very rapidly progressive : after the generation of only a portion of the gas, the round shot is set in motion, as it requires but little force to roll a ball. And here it must be remembered that to get the round shot into the gun it is necessary that its diameter should be somewhat less than that of the bore ; and that when it is rammed home up to the charge, it lies, in consequence of its weight, on the lower surface of the bore, leaving a "lune" or crescent-shaped empty space around the upper surface of the shot. Through this empty space a portion of the gas escapes ; and as it is in a high state of tension it presses the shot down on the lower surface of the bore, at the same time that the greater portion of the gas impels it forward. The reaction of the metal of the gun causes a rebound of the shot to the upper surface ; and the combination of this vertical motion with the horizontal motion of propulsion, results in the shot pursuing a zig-zag course through the length of the bore. Recognizing the existence of this motion, which is verified by the examination of the bores of the bronze † siege pieces of Foreign Powers, the traces of the blows of the shot being clearly defined, we cannot fail to see that the final direction of the shot as it escapes from the gun will depend upon the position of the last bound in the bore. Should, for instance, the last bound be against the lower side of the bore, the shot would fly further than if it had struck the upper side. • If it •

* Trunnions are cylindrical blocks of metal immovably attached to the gun, fitting suitable seats in the gun-carriage.

† Bronze, as applied to guns,

is an alloy of copper and tin. • In England the word "Brass," an alloy of copper and zinc, was erroneously applied in former days to the metal of the field-guns.

were to strike on the right side, the shot would fly to the left of the point aimed at, and *vice versa*. Need more be said to shew the great irregularity of the shooting of smooth-bore guns?

And yet there are many other sources of irregularity, a few of which may be mentioned. The quality and the condition of the powder vary; the diameter of the bore of the gun and of the shot vary between certain manufacturing limits; the weight of the shot again varies between certain limits. Again, no shot was probably ever cast perfectly solid, so that its centre of gravity rarely if ever coincides with its centre of figure. Lastly as every shot on leaving the bore is as it were detained for an infinitesimally short period as it touches the bore, while the opposite point of the sphere is free to fly forward; so every shot attains a motion of revolution round a variable axis. This axis will often change according to a well-known mechanical principle: and as this principle is of the highest importance as regards rifled guns, it must be explained in some detail.

Let us imagine any body which may be set in motion of revolution to be divided into a mass of particles closely fitting each other, like the grains in sand-stone. Let us say that one of these particles is situated at a distance of two inches from the centre of revolution. The force or quantity of motion with which the particle will act is represented in mechanics by the mass of the particle multiplied by the distance; the "moment" of the particle is represented by the force multiplied into the distance; that is, by the mass into the square of the distance. Now, if the sum of the moments of the whole of the particles of which the body is composed be taken, that sum will form what is termed "the moment of inertia" of the body.

Further, in any body, whatever be its shape, there are three lines termed the "axes of inertia." If the body revolve round the first, the movement of rotation gives the maximum moment of inertia. Around the second, the moment of inertia is a minimum. Each of these is attended with this peculiarity, that when it is the axis of rotation, the motion continues round that axis; and if by any extraneous cause the axis be displaced by a very little quantity, it will alter every instant, but always reapproach the principal axis of inertia. The axis of minimum inertia has this peculiarity to a smaller degree than the axis of maximum inertia; that is, the limit of displacement is less with the former than with the latter.

The third axis is intermediate between the two others and is of no importance in the question before us.

To fix the ideas as to these axes, let us take a new laid egg while yet soft, and squeeze it until the cross section, instead of being a circle, shall be an ellipse. The minor axis of this ellipse

will be the axis of maximum moment of inertia. The line joining the centres of the big and little ends of the egg will be the axis of minimum moment ; while the major axis of the ellipse of the cross section will form the third or intermediate axis. When one of the two first lines is used as the axis of rotation, the motion of rotation is stable ; in any other case, it is unstable.

The stability of the axis of greatest moment of inertia may be easily practically shown. Take a coin such as a penny ; and at any point on the surface distant from the centre, bore a hole through it and attach a thread nine or ten inches long. Hold the end of the thread between finger and thumb, and twist it. The coin soon begins to revolve about a vertical line through the point of attachment ; the axis of the coin, in the first instance, preserves the same inclination to the vertical line which it had when in a state of repose. The disc thus turns round the axis of the greatest moment of inertia ; but as the velocity increases, that inclination increases, and the coin raises itself up despite the force of gravity.

If, in lieu of a disc, we take a cylinder of a length of from ten to fifteen times its diameter and attach a thread at any point other than its middle, the axis of the cylinder, in the first instance but little distant from the vertical, will by degrees become more and more distant, approaching gradually the horizontal position as the velocity of rotation increases.

The reader is now in a position to understand how that the round shot leaving the bore in a state of rotation will change its axis of rotation, if that axis be not one of the two principal axes of moment of inertia : and a change of axis of rotation will superinduce a change of direction in the flight of a spherical projectile, if the centres of figure and of gravity do not coincide ; and this we have stated to be invariably the case.

In firing smooth-bore ordnance, the projectile appears for a considerable portion of its curved flight to be going directly towards the object, when suddenly it may sometimes be seen to diverge to the right or left. This change of direction is due to the alteration of the axis of rotation, and it is chiefly observable in large hollow projectiles—shells ; chiefly observable possibly from the velocity being less, and from their size being greater, which makes them more easily seen in flight than smaller solid projectiles.

The reader will now understand how dissatisfied artillerymen were with their smooth-bore guns when they found themselves likely to be exposed to the fire of rifled small arms.

If, in lieu of a shot in the form of a sphere, we fire one in the form of a cylinder, after a range of a few yards the shot tumbles over in the air and revolves around the axis of least

moment ; that is, one at right angles to the axis of the cylinder, if that axis be longer than the diameter of the cylinder. If, however, at the time the shot is impelled forward, that is receives a motion of translation in the direction of its axis, we can by any means give the cylinder a motion of revolution round that axis—the axis of least moment—we shall cause the cylinder to move head foremost ; for as the body revolves round one of the principal axes of inertia, the body will be stable in its movement : and if any extraneous force should throw it out up to a certain limit, it will gradually return to it.

In artillery practice with elongated shot with some guns, the projectile at starting may be seen to “waddle,” that is, revolve on an axis at a slight angle to the axis of the projectile. As the projectile flies on, this irregular motion becomes less and less, until the projectile gets steady ; thus attaining the condition which school boys describe, in allusion to their spinning tops, as “going to sleep.”

But the flat end of a cylinder meets with great resistance from the air. If to the front end of the cylinder we attach a head, the vertical section of which shall be that of the water line of a ship, we can understand by analogy how much superior would be the power of that body, when set in motion, to cleave its way through the air. If, then, we form the front part of the projectile so that its vertical section shall be the shape of a lanceolate gothic window, a form called “ogival,” though the projectile may present the same cross-sectional area as did the cylinder, it will be less impeded by the medium through which it flies, than if it had the original flat head.

It is well to try and realize in a familiar way if possible, what this resistance of the air is like. If the reader will take a fan in his hand and wave it edge-wise, and then turn the fan a quarter round and wave it face-wise, he will realize, in the first place, how greatly the resistance depends on the area exposed to that resistance. Further, it little matters to our sensations whether there be a wind blowing in our faces at the rate of ten miles an hour while we are standing still ; or whether we are carried smoothly through a perfectly still air at the same rate. In either case the pressure on our bodies would be about $\frac{1}{2}$ lb per square foot. If the pace were increased to 100 miles per hour, that is to the force of a hurricane which throws down trees, &c., the pressure would be 49 lbs. per square foot. With these familiar instances we might leave it to the reader's imagination to conceive the pressure on an elongated projectile flying at the by no means unusual rate of 1,400 feet per second or 955 miles per hour. We will, however, give him a close approximation to the amount of that pressure. At the above rate it would be about 1,625 lbs. on the square foot, or

80lbs. upon the projectile of a gun of three inches in diameter. It must be borne in mind, however, that as the velocity decreases the pressure decreases in a very high ratio.

There is a further circumstance connected with the cylindrical or cylindro-ogival projectile of the highest importance. It is this: if a sphere and a cylinder, or cylindro-ogival projectile of the same diameter be fired out of a gun, supposing for the moment that we can keep the axis of the last two in the direction of motion, the cross-section of those three bodies—that is, the area exposed to the resistance of the atmosphere—will be in all three cases one and the same circle. Supposing the projectiles to have all the same initial velocity at the mouth of the gun; and that the cylinder and cylindro-ogival shot weigh three times as much as the spherical shot, the momentum *—the power of overcoming the resistance of the air—would be three times greater with the elongated than with the spherical shot. Or to put it another way, if the spherical and elongated shot differed in diameter, but were of the same weight, the power of overcoming the resistance of the air would be the same, if the initial velocities were alike; but the areas exposed to that resistance would vary as the squares of the radii of the cross-sections.† Suppose the diameters were four inches and three inches respectively, the areas exposed would be as four to two and one quarter; consequently the elongated shot would meet with nearly one-half less resistance from the air than the spherical shot would.

We can now see how desirable it is to fire elongated projectiles as compared with spherical; but the former involve not only a motion of translation but one of continuous revolution round the long axis. There lies the difficulty, and on conquering this difficulty there has been expended an incalculable amount of brain-work and money. But before going into this part of the subject, it is desirable to notice another point of difference between the spherical and elongated forms of projectile. With the spherical shot the instant the first powder-gas is generated the shot *rolls* forward: while the elongated projectile fired from a smooth-bore *slides* forward. The friction in the latter case is much greater than in the former. When, however, the projectile has not only to be set in sliding motion forward, but at the same time to be set in rotation in a rifled gun, the resistance to the force of the powder increases in an enormous ratio; consequently the strain on the gun is vastly augmented. It will be seen, then, that without increasing the thickness of the gun and consequently its weight out of all reason, it is impossible to fire the same relative charge—the

* Weight multiplied into velocity. squares of their radii.

† The areas of circles vary as the

ratio of the weight of powder to that of the shot—with elongated as with spherical projectiles.

The various methods of causing the revolution of an elongated projectile may be thus classified :—

1.—By varying the form of the projectile so as to obtain revolution by the resistance of the air, the gun being a smooth-bore.

2.—Rifled grooves (helical-channels) cut in the bore, into which fit projections on the projectile. This is the stud or rib system, the gun being a muzzle-loader.

3.—Rifled grooves and lead-coated projectiles, the gun being a breech-loader.

The first system, though extremely tempting to the novice, has never been successful though tried in a vast variety of forms. It is based on the same principle as a child's toy formed by a little paper whirligig stuck by a pin to the end of a stick.

This is a wind-mill on a small scale, only that in the latter case, the wind-mill stands still and the wind (air in motion) causes it to revolve. In the former case the revolution is obtained, when there is no wind, by the child urging his whirligig against the still air. Those who have had the misfortune to embark on the venture of causing a shot to revolve on this system are much to be consoled with. They undoubtedly do succeed in getting up a certain amount of revolution, but as the velocity of translation is reduced, so is that of revolution, since the latter is dependent on the former : the result is that even at moderate distances the shot turns heels-over-head. But on the other hand, encouraged by a partial success, the unfortunate would-be inventor is dragged forward to renewed trials by the simplicity of the system as regards the gun. No complications are to be found there at any rate, he thinks. No power of reasoning or detailed statements of previous failures can deter him. On he must go after his *ignis fatuus* until weariness of mind and emptiness of pocket bring him to a stand-still in a slough of despond.

The second and third systems, which are those which obtain in the rifled artillery of all nations, both involve rifling the bore of the gun.

Everyone is familiar with the common nut and screw, though certainly it is not every one who is familiar with their construction. Let us therefore endeavour to explain it, as the rifled gun and its projectile form respectively a nut and screw. Let us take a cylinder of the proportions of an ordinary desk ruler and measure its circumference. Then cut a right-angled triangle of paper whose base shall be equal to the circumference of the cylinder, and whose perpendicular is the length in which we wish the screw or helix to make one complete turn ; this length is called

the "pitch" of the screw. If we now wrap this triangle round the cylinder so that the base shall accurately envelope the circumference of the cylinder, the perpendicular will be parallel to its axis; while the hypotenuse, or third and greatest side of the right-angled triangle, will trace the curve of the screw, making, of course, one full turn in the "pitch." The curved line, it will be easily understood, may be wrapped round the cylinder in the same direction as the motion of the hands of a clock, or in the reverse direction; the former is termed a "right-handed," the latter a "left handed" screw.

Suppose, now, that this cylinder were placed in a lathe and made to revolve once while a steel point is by some means made to traverse horizontally the distance we have above called the pitch; that steel point would obviously trace the same curve as that formed by the hypotenuse of our triangle. The screw traced on the outside of a cylinder is called the "male" screw.

To form the nut, we have only to substitute a tube, having its bore of the same size as the cylinder, and make it revolve in the same time as that cylinder; and to adjust the steel point so as to be capable of moving horizontally as before, but down the tube; we shall thus trace the companion or female screw of the nut. Or, again, if the tube remain fixed while the steel point is endowed with both the motions of translation and rotation in the same ratio as before, that is, that it shall traverse the length of the pitch while it makes one revolution, the point will trace the helical curve or screw. This last method is that adopted in rifling or cutting a screw inside the bores of guns.

We have now a male and female screw traced on the outside of a solid cylinder and on the inside of a hollow cylinder: but if one is to fit freely inside the other, the former must be somewhat less in diameter than the latter. Suppose it to be so: and instead of merely tracing the helical curve, let us cut a "thread" in both the male and female screws in the shape of the letter A with its head cut off at the cross bar or in any other suitable form. If the male thread be made somewhat less in width and height than the female so as to fit freely, the male can be screwed into the female screw.

We have thus a screw and nut with a single "thread," as it is termed. If the diameter of the cylinder and tube and the width of the thread admit of it, we may cut a second, third, or any convenient number of threads on the cylinder and in the tube. We should thus have a screw of two, three, or more threads. The screw of several threads is employed where great and sudden force is to be developed as in a coining press; for the pressure is distributed over a greater surface than with the single thread. The blades of a screw propeller of a steam ship are portions of separate threads. They get a better hold on the water than a single blade.

And here we must claim the reader's close attention for the action we are about to explain is somewhat difficult to understand. Suppose the male screw (right-handed) to be partially screwed into the female and let us fix our mind's eye at one part of the male thread; let us say, looking at the cylinder end on, at the point represented by the figure XII of the clock. At this point the thread runs forward and to the right: now let us change the position of our eye with reference to the tube and cylinder, and bring it directly above the point marked XII*; finally let us suppose the tube to be made of glass so that we could see what was going on inside and that the male thread is a very loose fit, the male thread standing equidistant from the sides of the female thread. If the tube be fixed and we push the cylinder, this act will bring one side of the male in contact with the corresponding side of the female thread; there will be a certain amount of friction between these two sides. But if we only push hard enough, we shall overcome that friction; and as the two form circular inclined planes in contact with each other, we shall cause the movable one to slide on the other; and to slide, the cylinder must revolve. We shall therefore push the point marked XII through the various points marked I, II, III, &c., and so on. Thus our pushing the cylinder has not only the effect of thrusting it forward—the motion of translation—but of causing it to turn in a motion of rotation *dextrorsum*. But let us mark this: that it is the *left* hand side of the female thread which drives† the screw round to the *right*. If any reader finds any difficulty in realizing this, let him imagine himself to be walking down a path bound on either hand by a wall, and that this path and its bounding walls gradually curve round to the right. If he walks perfectly straight forward he will find himself impeded from following the straight direction by the wall on his left hand: it is that wall which diverts him to the right.

To return to the screw, instead of pushing, if we pull the cylinder, that is, reverse the motion of translation: the cylinder will come towards us revolving in the direction opposed to that of the hands of a clock, that is, *sinistrorsum*; the right flanks of the female screw thread will turn the cylinder to the left.

We are at length in a position to go back to the gun. In the actual manufacture of rifled guns, the bore is in the first instance, a smooth cylinder; if it is a muzzle-loader and is to be rifled for projectiles on the stud system, a number of grooves—the

* If the reader will draw a figure shewing the male and female screws in plan with the sides of the male thread equidistant from those of the female, it will greatly assist his com-

prehension of what follows.

† This side of the screw in a right-handed thread is called the bearing side, and in guns "the driving side."

threads of the female right handed* screw—varying from three to nine in number according to the diameter or calibre of the gun, are cut from near the breech end of the bore to the muzzle.

This gun will fire a cylindro-ogival projectile of a length between two and three times its diameter. To fit the grooves it may have an equal number of male threads upon it, which are termed “ ribs ”; or portions of those ribs may be cut away leaving only two or three parts of each rib in the form of studs.

The reader will not be at a loss to understand that when the charge of powder, against which the projectile is rammed home, is lighted, the powder-gas impels the shot forward; while the “ driving sides ” of the grooves drive the studs and consequently the projectile round and thus the projectile is driven out of the gun in a state of rapid rotation. Thus the problem has been successfully solved on the second system.

On the third system, the gun is loaded from the breech. The projectile is lead-coated on its cylindrical portion; the lead coating being a perfectly smooth cylinder, without projections. The chamber which contains the projectile and charge is greater in diameter than the bore of the gun before it is rifled; indeed a little greater than the diameter of the bore measuring to the bottom of the grooves. The breech end of the gun being closed by a vent piece and binding screw, by a wedge or some similar device, the powder-gas impels the shot forward; the metal of the gun between each pair of grooves—termed “ the lands ”—comes in contact with the lead coating; and thus cuts out corresponding screw channels on the projectile; in short, forms the male screw on it; and as the rifling in the gun turns round like the hands of a clock, so does the projectile as it issues from the piece. The problem is thus solved on the third system.

Before leaving the smooth-bore altogether, we will institute a comparison between two guns firing the same weight of projectile and compare their effects in a ballistic point of view. We will take the ordinary field guns firing projectiles in each case of 9lbs. weight. The calibre† of the smooth-bore gun is $4\frac{1}{2}$ inches and the length of its bore is 16 calibres. It weighs 10 cwt.

* There is a curious circumstance attendant upon firing an elongated projectile from a rifled or screwed gun. If the rifling has a right-handed twist, there will be a constant deviation to the right. This deviation is to a great extent neutralized by the sighting of the gun whereby when the eye looks direct on the object, the bore is directed slightly to the left. All the guns of the French

Navy are rifled with a left-handed twist, whereby the constant deviation is to the left. This unusual direction of rifling was adopted solely from the fact that at their practice ground at Gavres, the sea is on the right-hand of the batteries and thus the projectiles eventually come inland instead of going out to seaward.

† Diameter of the bore.

or about $12\frac{1}{4}$ projectiles. The powder charge is one-fourth the weight of its round shot or $2\frac{1}{2}$ lbs.

The rifled 9-pounder gun has a calibre of 3 inches and a length of bore of 21 calibres. It weighs 8 cwts., or nearly 100 projectiles. The common shell* weighs 9 lbs. The charge of the gun is one-fifth† of the weight of its projectile or $1\frac{1}{2}$ lbs.

Let the bore of the gun in each case be elevated at an angle of five degrees above the horizontal plane through the axis of the trunnions; that is one-eighteenth of a right angle or quadrant, and let the guns be fired after having been directed at the same object standing on the level plain on which the gun stands. The smooth-bore will have sent its round shot to a distance of about 1,400 yards after having followed in its flight a curved path through the air: the rifled gun will have thrown its projectile to a distance of about 2,100 yards, that is one-half further than the smooth-bore. At the first glance this seems very extraordinary: the projectiles are the same weight and the charge of the smooth-bore is to that of the rifled gun as 10:7. Further the charge of the rifled gun has not only to expel the projectile, but to twist it with enormous rapidity.‡ In fact the round shot leaves the bore with a velocity of something like 1,500 feet per second, and the elongated projectile with one of only 1,350 feet: but it will be remembered that the surfaces exposed to the resistance of the air are as the squares of radii of the projectiles; that is, in the case before us about 2:1. Add to this that the higher velocity is met by an increase of resistance in a very high ratio, and we shall have a satisfactory explanation of the fact of the elongated projectile ranging one-half further than the spherical.

But the rifled gun is not only superior to the smooth-bore in length of range, but also in regularity as to that length as well as in direction. The British 9-pounder gun firing with an elevation intended for a range of 1,400 yards gives the following results. If we fire, say 1,000 rounds, the probability is that 500 shot will be found to have struck the ground in a rectangle measuring 195 yards long by $22\frac{1}{2}$ yards wide: with the 9-pounder rifled gun firing at a mean range of 1,383 yards, the sides of the rectangle are

* The nature of this projectile will be described further on.

† The generality of foreign rifled field guns fire a relative charge of only one eighth.

‡ The initial velocity of the projectile of the 9-pounder gun is about 1,350 feet per second and the rifling, and consequently the projectile make one full turn in $7\frac{1}{2}$ feet. Dividing

1,350 by $7\frac{1}{2}$ we find that the projectile will thus make 180 turns per second, and a point on its surface will travel at the rate of 139 feet per second. A railway wheel of an express train going at 50 miles an hour or 73 feet per second, makes between 6 and 7 turns per second. The velocity of revolution at a point on the earth's equator is $152\frac{1}{2}$ feet per second.

63 yards long by 2 yards wide ; that is, the rifled gun is three times more accurate in length of range and eleven times in direction than the smooth bore-gun.

The rifling above described is what is termed "a uniform twist:" in other words in any given length, wherever that length be taken, the grooves make the same part of a revolution. But as the force of the powder is much greater when it is first flashed into gas than when the projectile has reached the muzzle ; when too the gas has expanded so as to fill the bore and doubtless has lost much of its original heat, it seems desirable if possible to let the motion of rotation be communicated gradually, thereby relieving the gun of a certain amount of strain. This suggests the idea of an increasing twist, or one which shall give little or no rotatory motion for a few inches and then by degrees increase the amount of twist until at the muzzle the grooves shall give the projectile the same velocity of rotation as those of the uniform twist.

In the paper triangle above mentioned, if for the straight line of the hypotenuse we substitute an arc of a circle or a portion of a parabola, curves whose form is easily found and traced out, and that this triangle be then wrapped round the cylinder, the curved edge will trace the curve of the groove of increasing twist. This form of groove is attended with this disadvantage, that as the tangent to the curve is at a constantly varying angle to any straight line parallel to the axis, it is impossible in a male screw like the projectile to give the studs such an angle as shall fit the female screw everywhere. In the lead-coated shell fresh metal is sheared away at every inch of advance of the projectile. In the studded shot the method adopted is to make the front stud smaller than the rear and to give them the screw form corresponding to the pitch at the muzzle. This is at the best a mere palliative as the projectile until it reaches the muzzle is only held by the rear studs: there results an irregularity of motion inside the bore which cannot be but injurious to some extent to both gun and projectile. But the relief of strain on the gun was thought to be so great, that all the heavier guns of the British service are rifled on this principle. The advantage of this system of rifling is highly problematical.

The twist in rifling is best expressed by stating the number of calibres in which the grooves make one turn. The uniform twist varies in different guns between 1 turn in 20 calibres to 1 turn in 40 calibres ; the projectile makes from $\frac{1}{3}$ to $\frac{1}{2}$ a turn in the length of the bore rifled ; the increasing twist varies between 0 at the breech to 1 turn in 40 calibres at the muzzle and 1 turn in 100 calibres at the breech to 1 turn in 40 at the muzzle : the projectile making in both cases half a turn in the length of the bore rifled.

Here it may be mentioned that with small-arms on the breech-loading system, it has quite lately been discovered that if the rifling of an ordinary barrel be bored out, leaving merely some 3 or 4 inches of the original grooving at the muzzle, the projectile receives adequate rotation with the great advantage of a comparatively flatter trajectory.* This appears due to a diminution of friction which consequently causes an increase of the muzzle velocity, as compared with a barrel rifled from end to end.

We have now put the reader in possession of, we hope, some clear ideas as to the part played by a rifled gun, confining ourselves to generalities. We will now proceed to describe the various projectiles it fires: they are—

- 1.—Common Shells.
- 2.—Shrapnel Shells.
- 3.—Case shot.
- 4.—Palliser Shot.
- 5.—Palliser Shells.

We have described the external form of a rifle projectile as a cylinder surmounted by an ogival head. This form is somewhat like a sugar-loaf; but many of the glass-shades used in India for the protection of the flame of a candle, where the mouth is *not* splayed out in the bell-form but straight edged, more closely approaches it.

In the *Common shell*, the projectile is hollow, the internal form closely following the external, excepting towards the “nose,” where the metal is thickened to give it more strength at that point. In the “nose” is a taper hole with a screw tapped in it; the greatest diameter of this hole, termed the “fuze-hole,” is a little over one inch. It communicates with the hollow of the shell. On the exterior of the shell when intended for a muzzle-loading gun, brass, copper, or zinc studs are firmly attached, corresponding to the rifled grooves of the gun; there are at least two rings of studs, sometimes three. When the shell is intended for a breech-leading gun the cylindrical portion of the projectile has a thin lead-coating. The shell is filled with powder and for safety a brass plug is temporarily screwed into the fuze hole. Furthermore the inside of the shell is lacquered, to prevent contact between the cast-iron and the powder, and consequently injury to the latter. The common shell can be exploded after being fired by the gun in one of two ways:—either by a time-fuze lighted as the shell leaves the gun and burning at a known rate per second of flight, so that the moment the fuze is burnt out the charge is ignited: or by a percussion fuze† which explodes the charge at

* The Trajectory is the curved path of the projectile.

† A description of these fuzes will be found further on.

the moment the shell strikes the ground or meets with any obstacle. The common shell is chiefly used in firing at walls, earth-works, an enemy's gun, or for setting fire to buildings, wooden ships, and the like.

The *Shrapnel shell*, called after its inventor General Shrapnel of the Royal Artillery, is a more complicated arrangement. Its vocation is chiefly manslaughter, being fired at troops in the open field, in boats or on boardship, or wherever an enemy can be seen. The "body" or cylindrical part of the shell is of cast-iron, open at one end and closed at the other. The ogival head is of sheet-iron with a brass fuze socket in its nose, the interior of which is the counter part of the fuze-hole of the common shell. The two together closely assimilate in form to that of the common shell, but the shrapnel is shorter in total length. In casting the body a powder-chamber is left at the bottom, of smaller diameter than the remainder of the body. Into this fits a tin-cup with a cover closing it all but a central hole about half an inch in diameter: this cup is filled with a very small charge of powder, intended at a certain moment to blow the head off the shell and open out the body; to facilitate this, the circular walls of the body have a number of longitudinal weakening grooves cast in it; the whole shell is thus made very weak in resisting an internal force. On the top of the cup lies a wrought-iron diaphragm, its edges resting on the ledge in the cast-iron formed by the change of diameter from the powder chamber to that of the body of the shell. Next, a tube is screwed into a central hole in the diaphragm, corresponding to that in the powder-cup. This tube is long enough to reach a little above the mouth of the body when it is *in situ*. Now a series of layers of hardened musket bullets are filled in around the tube until the body is nearly full; then, melted resin is poured in, filling the interstices between the bullets and covering over the top layer. To prevent adherence of the resin to the sides of the shell, it is lined with brown paper before filling. On the top of the resin is placed a kamptulicon washer, to take up and communicate the pressure used in fastening on the head. Finally, inside the head is fitted a block of wood, so as to completely fill it save at the fuze-hole. The head is then pressed down on to the body, fitting to it as the lid of a wooden tooth-powder box does to its body. Held in this position steel wire screws are screwed through the sheet-iron of the head into the cast-iron of the body. The shell has studs or lead coating like the common shell. This projectile is best used with a time-fuze, that is, a fuze which can be made to ignite the powder charge after the lapse of a certain number of seconds. Supposing, then, that a shell moving with a velocity of 1,000 feet per second after a range 1,500 yards arrives

within 60 yards of a Battalion of Infantry in column—if any commander now-a-days could be found to be so rash as thus to expose his men—and that at this distance the projectile is five yards above the plain: further that at this moment the time-fuze ignites the charge in the powder-cup. The force of explosion suffices to blow the head off and to split open the body at the weakening grooves. The bullets continue to move forward, each animated with a velocity of 1,000 feet per second. But these bullets at the moment of bursting are being whirled round at a great speed: they radiate out like the flocks on the head of a twisted mop.* It is found that the cone of dispersion is one whose base is about one-third its height, the apex being at the bursting point. We can conceive, then, the bullets forming the lower side of the cone may easily strike the front company of the battalion, while those of the upper side will be carried further forward and strike the rear company. The effects of this projectile, when the fuze is accurately timed, are truly awful: it is in one sense fortunate that it is a matter of the greatest difficulty to time the fuze so as to burst exactly as above described. Burst with a percussion fuze by striking the ground in front of an enemy the effects are not nearly so good, as many of the bullets never rise from the ground at all.

The *Case shot* is merely a tin cylindrical canister filled with hardened musket bullets for field service or with sand shot—cast-iron shot weighing from two to four oz.—for large guns, the interstices being filled with a mixture of sand and clay to prevent the balls from knocking about. This projectile is burst inside the gun, and its contents are scattered over a range of from 50 to 400 yards. For good effect the ground should be hard and even; a ploughed field or one planted with almost any crop nearly completely annihilates its effect, since no ball ever rises once it falls. Though very effective at close ranges it certainly is the least alarming projectile to face: the gun itself seems to the person fired at to have in some way missed fire and the ground in front to be knocked up into little puffs of dust, looking like a flock of small birds taking flight. But a round at really close quarters, say within 50 yards, is most formidable. Gassendi an old French Artillery Officer and author, writes of case shot fire:—

“Les derniers coups sont les plus décisifs, ils feront votre salut peut-être, mais votre gloire sûrement.”

Pulliser Shot and Shell are intended for penetrating the slabs of iron forming the cuirass of iron-clad ships or of some modern iron-clad forts. The former is solid save a hollow central core of

* A shrapnel shell burst within a on it an annulus of bullet marks, yard or two of a wooden target leaves

one or two inches in diameter ; this is left in the shot as the castings are thereby caused to be more sound. The hole at the base of the shot is plugged up. The shell on the other hand is hollow, its internal following its external form, leaving the walls of the shell very thick, and the metal about the nose and base of still greater thickness. There is no fuze-hole. The powder charge is filled in from a hole in the base eventually closed by a screw plug. The charge explodes on the shell striking an iron plate in consequence of the enormous heat developed by the blow.

Both the shot and shell have the ogival part "chilled" in casting ; that is, the shell-mould, in lieu of being of sand as in the case of common shells, at its apex is formed in a mass of very thick cast-iron, the inside of which is lamp-blackened. The nature of molten iron used is of vital importance ; all iron would "chill ;" that is, the thick iron mould robs the molten cast-iron very quickly of its heat and thus it becomes as hard as steel ; but it is required not only to be hard, but extremely tough. By proper mixtures of certain brands of iron both ends are obtained. There is but little difference in penetrative power of the shot and shell of the same gun. In round figures we may say that a 10-inch gun can send its projectile through a 10-inch wrought iron plate and so on all through the series of plate breakers from the 7-inch gun of 7 tons up to the 12-inch of 35 tons or "Woolwich Infant."

To bring this cursory account of rifled artillery to an end, we will describe the Time and Percussion Fuzes, which enable us to burst the shell after the lapse of a certain time or after arriving at a certain place. The descriptions will, it is feared, be difficult to comprehend without illustrations.

In a muzzle-loading gun we have shown above that there exists an empty "lune" or air-space between the upper surface of the projectile and the bore, when the gun is loaded : and that a stream of burning gas escapes over the projectile and thus envelopes the nose of the projectile. If, then, we close the fuze-hole so as to be gas-tight by a plug of wood, having a column of slowly burning composition driven or pressed hard into a channel through the plug, it is clear that when that composition is burnt out its fire will at last reach the powder charge and explode it. This plug would then be a "fuze." But to drive or press this composition into the fuze, it is convenient to leave the bottom of the plug or fuze solid, that is, not bored. The fuze, then is a plug of wood about four inches long in the form of a truncated cone, whose least diameter is about nine-tenths of an inch, and whose greatest is one and one-third inch. The composition channel is about a quarter of an inch in diameter, and is not bored down the axis but a little eccentric. This composition is of two sorts :

with one the column burns at the rate of one inch in five seconds for short ranges ; and with the other, one inch in nine seconds for long ranges. Two powder channels are bored from the bottom of the fuze parallel to its side reaching up as high as the top of the composition column, that is within about one inch of the top of the fuze. These powder channels are likewise excentric, but on the opposite side of the centre. Between the powder and composition channels then there are thin divisions of wood. To enable us to time the fuze, that is, to cause it to burn out in any time we please, nine "side holes" are bored into each of the powder channels. In the five second fuze the topmost side hole of one channel being at such a distance from the top of the composition as will burn out in one second, the next hole at a distance which will burn out in two seconds and so on. In the other powder channel the top hole corresponds to one half-second, the next to two half-seconds and so on. Thus the holes correspond to spaces of time corresponding to all times of flight from one half second to every successive half second in the whole length of the column which corresponds to five seconds.

In the nine second fuze there are nine holes into each powder channel corresponding to 18 half-seconds.

The powder channels and side holes are filled with fine powder, and their orifices closed with putty : the whole fuze is then covered with paper, and then painted and varnished. The priming is composed of a few strands of quickmatch* wrapped round the outside of the head of the fuze, passing in through a hole in the side of the head and fastened to a copper-pin in a brass screw plug which closes the composition column hole at the top. If we wish the fuze then to burn out after the lapse of three and a half seconds, we enter a gimlet at the point marked seven and bore through the powder, into the powder-channel, then through the thin partition of wood into the composition column. In three and half seconds after the fuze has been lighted by the flash of the powder in the gun, the composition will have burnt down until it meets the gimlet hole, the fire will then pass through it until it meets and sets fire to the powder in the powder channel : this exploding, fires the charge in the shell. In both fuzes the side hole corresponding to the extreme duration of burning of the fuze composition, unlike the other side holes, is bored through into the composition column : so that if the fuze be fixed into the shell without being timed, the shell will explode after the lapse of five and nine seconds respectively. This fuze is termed *Boxer's Time Fuze* ; and it is only applicable to muzzle-

* Quickmatch is composed of cotton wick steeped in gum water and then dredged with "mealed" powder, that is, powder reduced to an impalpable grain.

loading guns, since in the breech-loading guns there is no escape of gas past the projectile. Foreign breech-loading artillery with some exceptions have no time fuzes.

The *Percussion Fuze* is composed of (1) the body, a brass hollow cylinder $1\frac{1}{2}$ inch in depth with an exterior shoulder, screwing into the nose of the shell; inside of this fits (2) a guard or hollow brass cylinder open at both ends, the hollow being of two diameters, thus forming a shoulder midway: next (3) a lead-pellet, a hollow cylinder with four lugs or studs outside, two of which rest on the end of the guard: in the front of the lead pellet is a detonator somewhat like a very shallow percussion cap; internally the pellet is filled with gunpowder dried from a pasty condition. The body is closed by the bottom (4) screwed in. A hole in the bottom is filled with powderpaste; an axial hole being left in the paste of both pellet and bottom. The central hole in the bottom is closed by a thin brass disc. If by any means the two lead lugs of the pellet which secure it in position are sheared off, a second pair of lugs at right angles to the former come into play, and may prevent the pellet from being driven forward. If, however, the first pair having been sheared the momentum* of the leaden pellet is sufficient to shear the second pair of lugs, the percussion cap would come in contact with a needle which protrudes internally from the centre of the body. The flash passes into the interior of the pellet and blows out the disc which closes the bottom and thus fires the charge of the shell. It is, however, desirable that these lugs be not sheared off by accident. To prevent this a safety pin (5) is passed through the body and guard and secured in its position by a wire ring passing through the eye of the safety pin and lying in a recess in the upper part of the body. If the lugs were sheared the pellet would come in contact with the safety pin and the detonator could not touch the point of the needle. The shell may thus be "fuzed" before going into action and be perfectly safe from explosion by accident. When the shell is in the bore of the gun at the muzzle, the ring is taken out of the recess and the safety pin drawn out. But the hole left by this pin would allow the gas of the powder charge to pass through and thus explode the shell. To meet this danger, a cylindrical lead plug (6) is let in from the top of the body being supported by the pin and kept from falling out of the body by a brass-disc. When the pin is withdrawn this lead plug falls down and closes the safety-pin hole.

The action of this fuze is simple, whatever may be thought of its description. When the shell moving at say 1000 feet per second meets with a check, either from a solid obstacle or from a "graze" on the ground, the momentum of the

* Weight multiplied into velocity.

lead-pellet suffices successively to shear the two pairs of lugs ; just as a man sitting with his face to the engine in a railway carriage, when it comes into collision with any obstacle, is shot forward into the arms of the person opposite, so the detonator comes in in contact with the steel needle and the shell explodes.

We have thus given the general reader some succiunct ideas on rifled artillery, and we have done so under the great disadvantage of being unable to assist him in understanding our explanations by drawings. We will endeavour in a future number to show how the principles above enunciated have been applied in modern rifled artillery.

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ART. VII.—MADRAS STATESMANSHIP.

LITTLE more than two years have gone by since the Government of Madras adopted, after mature discussion in the Legislative Council, a measure which promised to quicken the whole administration of the Southern Presidency.

The Local Funds Act at once increased the material resources at command ; and re-organised the agencies that applied those resources. District councils composed of independent equally with official members were to give united advice and exercise joint control over the public works, the education, and the sanitation of the country. Funds also were to be provided, where necessary, by cesses or taxes levied on land and houses and professions. Education especially was to be placed within the reach of the masses : elementary instruction in village schools being provided for by a system of which the central principle was to group as much population as possible around each school, while at the same time no rate payer was to be called upon to contribute to a school which was not within reasonable distance of his dwelling.

We drew attention in the pages of this *Review*, just two years ago, to the scheme as it then promised to work ; and we reviewed recently the actual working during 1871-72, as it was illustrated in the reports of the Director of Public Instruction for Madras.

Hardly, however, had the new machinery been set up, when other counsels prevailed ; and orders were issued that the whole system was to be abandoned, the machinery thrown out of gear, and the provincial administration to revert to the old methods, working in the old, slow, fitful, and inefficient manner. The wisdom of 1871 has become the folly of 1873. The tide which swelled up to the flood two years ago, has now ebbed back into the deadest stagnation ; and Madras has received orders from her Governor and her Councillors that she had indeed been awakened too soon, and may fall off safely to her slumber again till—well, till Heaven helps her.

It is, we acknowledge, a mistake to mix up public questions with personal considerations ; but it is impossible to forget that Governments are but men ; that acts of Government express the opinions of men in power ; “ Government,” said Mill, “ consists of acts done by human beings.” By what process then, not of reason—that will not help us—but of conjecture, are we to explain this fickleness of opinion by which the white of to day becomes black to-morrow ? The Madras Government has, indeed, changed slightly in its *personnel* during these two years. But the men in authority now had most of them some share in the discussions

that preceded and in the expressions that approved the Local Funds Act. And what sort of minds are these that deliberately adopt a policy, for which at least they then had excellent reasons to offer ; yet now in exactly the same circumstances, without even giving a reason for the change, abandon that policy utterly, as if it were mere folly ! The light falls on the same objects as before, when their eyes saw clearly the way before them. Why are they now dazzled by the light ; and why do they shrink back into the darkness ?

There is something positively painful in the abjectness of spirit with which the Government has published its changed policy. "It is true," says the order, "that all officers were instructed to collect information on educational subjects ; to prepare schemes for the spread of elementary education and the founding of village schools. We had some intentions of this sort some time ago ; but that is all changed now. We are older and wiser men ; and after that fitful fever of energy shall sleep well. Tear up your schemes, our officers ; abandon your projects of improvement. You shall keep your machines, but they are not for use ; and as we shall not allow them to be set a working, they can do no harm." And so Madras *has* gone to sleep again ; not perhaps unwillingly, since her habit has long been torpid. And hardly a voice has been raised to protest that the good work that was done two years ago by men of ability and foresight, should not lightly be undone by their less able or more timid successors.

It is, we know, useless to try to awake her now. She must sleep out her sleep, until she reaches more stirring times or gains more active masters. But it may be useful, and it *must* be right, to say that some regret the change ; that the abandonment of the only progressive measure that Madras has produced for thirty years gives real pain to those who have the true progress of this miserable country at heart.

Now the excessive weakness of this reactionary order lies in its almost brutal bluntness. The tree that wanted but tender pruning is cut down to the very ground ; and it will be only with a struggle that hereafter some life may show itself in the poor trunk that is left. For the only ostensible reason even alleged by the Government for the total destruction of all the essential features of the Local Funds Act lies in the excessive haste and rashness with which the educational portion of the scheme was being developed. It is useless now to point out that this unwise haste was never checked, but rather stimulated by those who ought to have known best how to control it ; that is, by the officers of the Educational Department ; who either threw themselves headlong into the school-founding mania, or else abstained wholly from assuming their due

share in the guidance and control of the new scheme of elementary instruction. If the reform was being carried too far and too fast, what difficulty was there in wisely moderating the pace? But instead of restraining over-eager officers, the Government, like a timid horseman afraid to rein in his horse whose paces frighten him, dismounts at once in terror, and locks the horse up in the stable, rather than train it into docility.

It matters not whether the dangers apprehended were financial or administrative, the same restraint could have been applied on each side; and though we have not leisure here to examine the statistics of the question, it is enough to repeat the statement made in our last article, and with which all our experience agrees, that the burden imposed by the house-tax would, when distributed individually, prove so light as to be almost imperceptible. The Government has never ventured to appeal to figures in support of the view, upon which this reaction is based, that the house-tax would be an intolerable and unpopular burden. It is easy to whine about oppressive taxation, and to say that the country is not ripe for education. It is not so easy, and has at least never been attempted, to prove in black and white what the demand for education is, and how much the people are willing to pay for it. As for ripeness, what is that argument worth? The country, as India, a poor and half civilised country—is ripe for nothing, but starvation and lawlessness and ignorance. As an English province, however, it is ripe for much: for a measure of civilisation and knowledge: for law-abiding manners, and at no distant date for material prosperity and even wealth. If English statesmanship is to wait until it sees the fruit ripening, what merit will there be in that tending and culture? Our only aim can be wisely to force the plant into bud and blossom and fruit earlier than it could ripen in the open sun.

If the financial reasons for this recreant statesmanship be unsubstantial, what other reasons can be offered in its excuse? That elementary education is a real want, a crying need of Southern India, can surely not be denied. While results already obtained prove to demonstration that real progress has of late been made in the spread of simple knowledge among the rural populations, want of success could not be alleged as a ground for relaxed exertion. Every year in the life of the Educational Department has proved more conclusively that valuable results follow immediately on improved organisation and increased effort in this field. It is therefore of malice prepense, and with a full knowledge of what they are doing, that these Madras statesmen draw back from the path of elementary education. True, the cause is not an attractive one; there are no present rewards of enthusiastic meetings, and platform addresses, and sweet words

of counsel to young graduates ; no prospective statues, nor even Stars of India. Primary education deals only with the lower classes ; the poor ignorant clowns, who, even if you refuse them light, will not complain of their darkness ; and who are indeed "not ripe" for education. So they are to be left as they are—God help them !—and to civilise themselves as they best can.

Let it not be said that the progressive policy is still open to an active officer who discerns the people's wants and tries to supply them. It is not so. The whole scheme of progress has been discredited by this chilling order ; the tide has been turned and is steadily ebbing down. The avowed policy of the Government has been declared to discourage progress and to counsel inaction. In the future nothing but the most bold avowal of the contrary can set the car of the State on the forward move again. The Noes have it ; and the whole question must be again debated and decided before the Ayes can win a victory. And the mischief already done is incalculable. Who in the future will believe that a Madras Government can really progress ? For two years the whole Presidency has been astir. Nobody could doubt the advantage that arose from the quickening of official pulses, and the admission of new blood and life into the administration. The skeleton indeed remains, and we are told to keep and cherish it. But 'can those dry bones live' ?

Local Fund Boards are told to work away, but it is making bricks without straw ; nay, the very clay is denied them. They were founded to control public works, and they are told not to trouble themselves about the contracts for, nor the execution of, those works ! They were founded to spread elementary education, and they are told that there is hardly any money for village schools. The inevitable effect must be to stagnate, if not to diminish the flow of progress in education. It required a strong declaration from the local Government to obtain any improvement at all in this matter. The cause of education is not a popular cause. It is unfashionable, even vulgar ; and not only that, but there are no doubt difficulties of exceptional power in this country, arising out of the utter apathy of the mass of the lower classes, and the lukewarm zeal of the higher classes in the spread of elementary education.

Having only recently obtained any education worthy of the name for themselves, the higher classes are by no means anxious to throw open the paths of privilege and power by the general diffusion of knowledge. It therefore required the whole strength of official influence, and the free use of public money to start elementary education fairly in the race. But now the scale of primary education must kick the brain ; for Government favour has been thrown into the other side of the balance ; and every

officer who ventures to propose a village school, and to spread primary education in his district, knows that he is doing an act which is far more likely to win him the censure than the thanks of Government.

It must be so. Half measures are in such a case impossible ; and simple impartiality a pretence. Either education is to be extended or it is not ; if it is, money must be supplied and agencies organised. And the last official utterance is—"we can promise you no money, and we will have none of your schemes."

We have now said our say ; sadly but soberly. Anger would be misdirected against authorities so high ; and argument, we fear, is useless with those who never employ it. Popular ignorance too will rather applaud than condemn this recreant policy. The *quidnuncs* of the Madras Press, have already clapped their hands on their purses, and thanked heaven that they are freed from the fear of taxation. We see no remedy ; we have almost ceased to hope for one ; but to be silent would be to accept complicity in the folly and cowardice of the latest development of Madras statesmanship.

ART. VIII.—MILITARY NOTIONS.

- 1.—*Proceedings of the United Service Institution of India*, May 1873.
- 2.—*Cavalry at the Camp*. By Captain Osmond Barnes.
- 3.—*My Diary at the Punjab Camp of Exercise, 1872-73*. By BEECHWOOD.

THERE are indications in recent military literature, that in India as well as at home we are beginning to outgrow the age of Prussian translations and entering upon the era of original notions, if we have not yet quite attained the full stature of original ideas. If I, *longo intervallo*, try to follow in the footsteps of critics at home as an advocate of progress and an opponent of retrogression under whatever disguise, and attempt to distinguish true notions from false, it is because I have something to say which Captain Adam a "true reformer" has not said; and others I know, more capable perhaps than I, of grappling with the subject have not the requisite leisure.

Before reviewing the papers of the United Service Institution it may not be out of place to discuss briefly what are the proper functions of such societies. At the last anniversary meeting of the English Institution, Sir William Codrington, who as an old guardsman and staunch defender of the line formation, in the pretty hot fights there, cannot be accused of being too little conservative, made the following admirable remarks :—

"There can be no doubt that there are many questions which are, to use a common term 'ventilated' and discussed in a society of this sort, that cannot well be ventilated and discussed by a Government which would naturally be loath to give an opinion on subjects which we are free enough to give an opinion upon in this institution. Therefore it is that this Institution is one of great value and that it is appreciated."

In this matter of military publications, not long ago we had a manifesto from their head, which shews the entire liberality of the Prussian General Staff. Von Moltke has had occasion to inform the world how far certain publications are official and how far not, and this is in effect what he says. He speaks with the entire openness, and a touch of the scorn, of strength :—"To persons desirous of indulging in military composition we have lately given every reasonable facility of access to official documents. All we have asked in return is that the facts shall not be distorted; but although so far we have been the censors of certain recent military works we are

censors of the facts, not suppressors of opinion ; and as for the views derived and expressed, take them for what they are worth. If ever we have erred we dare confess it, and you the public are welcome also to sit with larger faith than ours at the feet of the Gamaliel should he turn out one." Surely these are principles that are worthy of imitation ; a fearless publication of facts, however unpleasant,—and what have we so unpleasant to confess as the St. Privat massacre ?—and a hearing for all sensible deductions from these facts, openly admitted.

I do not think that our Indian officials, either as officials or as members of Council of the U. S. I. of India, have quite come up to the above standards. Several papers which have been offered for publication in its journal, and have been rejected, have come under my notice ; and as I am not the author of any one of them, I may express my humble opinion, after a careful perusal, that there are at present in existence rejected addresses, having a present and practical interest, by the suppression of which the Indian military world has sustained a loss greater than would have been inflicted on it by the omission to print the whole of the number which I am about to review—and I say this with a full appreciation of its unusually high quality. I have been sorely puzzled in reading them to find where, in papers of undoubted ability and full of useful suggestions, lies the sentence which displayed the cloven hoof and caused their rejection, and I have at last pitched upon some fault-finding with a small detail of camp or expedition, whose only sting lies in its truth. Our affairs lately have not been so ill-conducted or so wanting in general success as to justify this dread, in minor matters, of encountering criticism, both gentle and just.

The suppression of any really good papers in India is much to be regretted, because, from inevitable causes, not likely to be soon removed, the United Service Institution of India must ever be a weakly plant. Men who have written a technical article of a really high class will prefer to send it to the English journal. The drain of talent caused by the periodicals and the Press, which even in England brought the Institution daily into the hands of second-rate men, and compelled the introduction of paid lectures, will, in a lesser degree, but still perceptibly, affect the available talent in this country. When, in addition to all this, contributors are warned that they must not write anonymously—an entirely useless proviso when there is nothing personal in the article—a proviso which some will, when they grow wiser and reperuse their articles, possibly themselves regret—that they must never allow themselves to forget, as a recent notice has told them, they are supposed to be speaking at a public meeting and must moderate their expressions accordingly—it is not surprising that the printing

press of the Institution is employed in giving to the world chiefly the contributions of members of council, the diploma papers of officers of departments, with here and there an old story retold or a discussion of some very visionary future.

The first paper, that of Colonel Newall, contains much interesting material, and displays considerable brilliancy of imagination, but enunciates military views which I do not believe to be sound, and with which I cannot agree. Military villages, which Colonel Newall recommends us to establish on our frontier, are feudal and barbarous institutions unsuited to the times—unsuited to the non-military constitution of our Indian Government, and to the whole policy of law which we have adopted. Occasions will, of course, arise in which able politicals on the frontier will make use of one tribe to get at another, and we may subsidise with advantage States which, though barbarous, have some semblance of stability and regular government; but the time has gone by for England to defend its frontier by buying Waziris or hiring red Indians. I can conceive nothing more likely to betray us into rapid collision with our neighbours than becoming godfather to 500 little Khivas, and making ourselves responsible for the crimes of an organised vendetta conducted by petty frontier village robbers. Again, I think Colonel Newall greatly exaggerates the value of the Indus as a base. A formidable obstacle it is no doubt, but it cannot in these days of enormous war material and of railways be looked on as a first-class line of communication. Colonel Newall uses, in a rather bewildering manner—which I confess I cannot always grasp—a number of military terms, such as the pivot, base, inner radius. I dare say I am slow of apprehension, but when he calls Pesháwar the pivot of our trans-Indus position and the key of the Indus Doabs, I understand what he means sufficiently to demur. If the whole of the five rivers joined at one point and there stood an Indian Mayence, he could hardly speak more strongly. Does Colonel Newall really believe that Pesháwar is the one important point across the river from Karáchi to the Khaibar, or that it is of greater value than Attock, Láhor, Múltán, or half a dozen other river passages and places? Again, Colonel Newall speaks of the saliency of Pesháwar as giving it great flanking powers. Of course, we all know that the more salient a bastion is the more annoying it is to besiegers, but also the more difficult to defend. Moreover, it is dangerous to argue carelessly by comparison of things which are like only in appearance. Pesháwar totally differs from an advanced work of a great fortress, in this, that a great fortress has many bridges which do not depend on the seasons, and that its fire commands the advanced works. Pesháwar is many miles beyond a river without permanent bridges, and far out of the reach of fire support. In fact, I think

Colonel Newall greatly exaggerates the value of our trans-Indus position.

If we do not meet the enemy before he reaches that narrow strip we hold beyond the Indus—and many years must elapse before we have to solve the problem under these conditions—there is nothing in the material resources or military advantages of the Dehrajat alone to justify us in fighting a decisive battle on the wrong side of such a river as the Indus, save very close to a bridge head, securing our retreat. Let us make of Jacobabad and Pesháwar Phalsbourgs and Königsteins—sources of delay and possible annoyance to a victorious, of grave danger to a retreating, army, without causing serious drain upon our main resources; but let us not spend enormous sums of money in turning them into great intrenchments, tempting us to linger in the presence of superior numbers, beyond our best obstacle and ditch—a large intrenched camp at Cherat would be the worst kind of Metz we could possibly invent for ourselves. When a great contest is waged for empire, with anything like our present frontiers, our railways will be completed, and Karáchi, Haidarábád, Sukhar, Bháwalpur—if the railway crosses there—Múltán and the passages of the rivers from Attock to Láhor, with the two great railways, will be the lines, pivots, keys, or whatever we please to call them—and North-Eastern India and the sea our great bases. The loss of Jacobabad and Pesháwar, or any places beyond the Indus, will not, except politically—and the political situation of that future we can hardly guess—play a leading part in the great military struggle for the Panjáb and the Indus.

But I am carried away by the author I am discussing into his world of dreams; the large question of a further advance as far as Quetta and Kábul or even Herát, instead of a withdrawal to the Indus, I do not enter upon. It is not necessary to adopt either alternative if we are not tempted to transform a fair outpost frontier into a bad main line of defence; but at the same time I do not quite sympathise with the cry “no retreat” of Colonel Newall, and his dread of the consequences; nor do I implicitly believe in the want of appreciation of strength without swagger, with which natives are always credited. I have observed that a lesson administered to the most eager member of a pursuing crowd, who mistake a deliberate retreat for a panic flight, has a most sobering effect on the remainder. If it suited us to retire beyond the Indus we should, if our passages were well selected, very soon teach anybody who presumed, to moderate their enthusiasm, by catching them in the open between the Indus and the hills, like rabbits between corn and, fuize. I entirely agree with the writer in his estimate of the Bholau Pass. At present the northern routes seem the more nearly

threatening, for it is a fact which people appear to forget, that Samarkhand is twice as near us as Khiva, and three times as near as Asterabad; but there can be little doubt that an army which succeeded in mastering, say, the passage and railway at Sukhar, and then mastering Múltán, turned southward along the railway and between the river and desert, bribing hard all the while in Haidarábád and Rájputána, would place matters in India in a very unpleasant position, and check Bombay speculation very considerably. But I do not hold with Colonel Newall in his estimate of the flanking powers of Kashmir. General Bright, by a few sensible remarks, compelled Colonel Newall to excuse and modify opinions he had expressed. When Colonel Newall says that a flank attack could be repeated in Doáb after Doáb, he cannot have fully considered that, whatever the season, such a large army as would probably invade the Panjáb would succeed, if it succeeded at all, in crossing the rivers in the plains and closing passes beyond any point that the army hovering on the flank could reach, by bad roads through the hills, and crossing the rivers à la Blondin higher up. The hill stations would, of course, try to hold their own for a time in a partisan warfare. A few Ghúrká regiments and a mule battery or two might do good service in causing annoyance and harassing the communications where the Pesháwar-Ludiána road touches the hills; but a very few miles of the plains would find the limit of footmen and mules—for the idea of cavalry sweeping down from Kashmir is one which excites a smile. Or in some future time when Kashmir is an Anglicised sanitarium, when Gulmurg is synonymous with Goodwood, when there is a Kashmir valley railway, with turnpike roads or a Fell tramway to Abbotabad and Marri, Kashmir may play its part in a really serious diversion. But with a political situation, and communications in a state at all approaching what they are at present, it would be a grave error to commit any considerable army to the dangerous and useless duty of wandering among the Kashmir passes between a possibly hostile native State and a large invading army, when it might be playing a great part on the ten backs of the five rivers, or before Láhor or Múltán, with railways and friends to fall back upon.

I have lingered too long over visionary plans for the defence of India; but the paper before me, whatever its practical value, is certainly suggestive and stimulating, and I am glad to have the opportunity of concluding my notice by stating what I think to be our true military policy. Until native princes have received English education, and are as completely alienated from their old ideas as Dhulip Singh; when they shew their good sense and total loss of patriotism, by living in England, or until Indian Rájás marry the daughters of English noblemen, and

English civilians and soldiers ally themselves with old native families—a time we have not quite reached, it is manifest that we can have no true friends, no reliable party in any native State; all sentiment, affection, love of country, religion, are against us, and only the basest self-interest in our favour.

Why, then, should we strengthen the military power of our feudatories? Rid even native princes of the Resident Schoolmaster, and make them independent, and they are still accessible to the attractions of money, increase of territory, and even the delusive hopes they see in change. And even when we secure native princes, we do not always secure their subjects. This is especially true of Kashmír. A low diet is best for semi-independent States; enough troops to maintain order or capture a Kuka, but not enough to admit of enterprise in directions quite uncertain. The reminiscences of the loyalty of Kashmír princes and Gwáliár soldiers are not encouraging. In the expenditure of money, when we have it to spare for military purposes, we should always have two great objects in view—the near one, the consolidation of our power within India: the remote, not very remote now perhaps, the preparation for future defence from invasion. There are many works which fulfil both these objects, such as the improvement of railway communication all over India, but especially those of the Láhor, Dehli, Karáchi triangle; the gradual establishment of strong places all over India at points of strategic importance, but especially those on the line of the Jhelam and lower Indus; the establishment of forts defensible by small detachments for the protection of our hill stations and to close for a time our hill roads, but especially those of Abbotabad and Marri. But I think that works of internal value should have at present long precedence over those of pure defence from external danger; and I believe that among the things least conducive to either object are intrenched camps beyond the Indus, and armies in Kashmír until it is, our own. Although we unfortunately cannot get the loan of Prince Bismarck to take Kashmír for us, right or wrong, we can assist Persia with money; and, when we have an opportunity, use pressure to make her a naval and commercial power on the Caspian. Timber she has in plenty, on its southern coast. We can consolidate Afghánistán and Yarkand, and encourage them at all times to smoke out the hornets' nests of petty tribes on our frontiers and their own. And if we do all these things, the invasion of India is pushed into a distance so remote that we shall have no Emperor of Russia, to fear, but rather the Socialist Propaganda of the Panslavonic Republic, the elements of which are even now not wanting in Imperial Russia.

Captain Creagh's article on Range Finders is the product of considerable labour combined with powers of accurate analysis;

it is a very interesting and satisfactory paper, but of too technical a character for lengthy discussion in aught but the engineering journal whose articles it abstracts; and, like them, it deserves to be read in full. A few points I may, however, touch on. Captain Creagh is no doubt right in his low estimate of the human power of judging distances at long ranges. Where, then, are we to find a substitute? It must either be a range finder or selection by trial shots. The list of difficulties and desiderata so exhaustively discussed by Captain Creagh is not favourable to our hope of discovering perfect range finders; and did they not possess the advantage of silence, we should be disposed to think the system of trial shots the best, I think, for use in the field. An instrument, which would give an accuracy within the limit of half the long axis of the spread of a shell's fragments, would answer all practical purposes. In prepared positions where there is plenty of time, and in sieges possibly, the range finder will exercise its vocation with success; but for horse artillery I believe trial shots, aided by a powerful telescope on a tripod, will be found more rapid and practical in the end. We must take the chance of the enemy moving off.

Major Norman writes good English, which, totally apart from his subject, it is a pleasure to peruse. It appears to me he is rather inconsistent in saying he disapproves of European non-commissioned officers in Native Regiments when his whole essay is written in their praise. In the Cavalry, especially in these days of numerous detached small outposts, the number of officers is totally insufficient, and detachment commanders, capable of speaking and writing reports in English, are absolutely necessary.

Colonel Osborne has, I think, hit upon the right principle for pankhá-pulling, but in the instances quoted of the successful employment of condensed air, although the distance to which the power was transmitted was great, it does not appear that there was a great consumption of motive power in the escape of air such as would occur in the case of several hundred pankhás being pulled, each with its separate jerk. This will probably be the difficulty to encounter, and may necessitate all the punkhas in a bungalow being pulled by one subsidiary engine, in which case there will be a want of the liveliness of the thin rope and light hand, but certainly the drowsy element will be removed. The suggestion that the expanding air, by making large quantities of heat latent, will tend to cool the bungalows, is ingenious; but then there must be enough of it. Possibly as one fluid is much the same as another, and both equally clean, the piping may be made useful in the transmission of water and thus decrease the expense of that item during six months of the year.

Captain Colquhoun's paper contains one of those extraordinary "notions" which make their home in young periodicals; although

it shows a conscientious mastery of his subject in all its details. Does he seriously recommend the substitution of surface lines of rail for permanent bridges and embankments? There is at this moment a bridge and an engine buried beneath a river's sand; where would his line be after the flood, and meanwhile how is the traffic to be kept up?

I have put off the discussion of General Thesiger's and Captain Adam's papers to the end, as they appear on the surface to represent two antagonistic theories; but however desirous of doing justice to the subject, I shall be compelled in the one case to limit myself to the removal of one or two fallacies, and in the other to a brief expression of agreement with the principles expressed. To review each paper point by point would result in my writing an essay—a drill-book. Everybody, I suppose, has begun a drill book longer than either of the papers themselves.

I confess I am thoroughly disappointed in General Thesiger's paper. Let me not be misunderstood. I am disappointed because I looked forward to the paper being really what it threatened to be—an able defence of the old system in its integrity, which would cost the new school a tough brain fight to overcome, and it is neither more nor less than an appropriation of nearly all that is good in the modern system, with some excellent advice against abandoning all that is good in the old. The conservative paper of General Thesiger is almost as radical in reality as the paper of Captain Adam, which tells us that the working classes are republicans, and must be argued with, not ordered; so that I am reminded of the story of the divine, who, after a fierce argument on a religious subject, informed his adversary that he despaired of convincing him, but that his sentiments were completely expressed in a certain pamphlet, which the other had written. But though General Thesiger, to my mind, surrenders almost all the important points, he uses certain arguments which are assuredly fallacious.

General Thesiger appears to think that the advocates of change have laid the whole success of the Germans to the credit of their superior tactics, but there is abundant proof that this is not the case. In the well-known Wellington Essay—here let me *en passant* remark that though its author may be stigmatised as young and inexperienced, he strove with success against Sir Garnet Wolseley and other eminent soldiers, and that success no unprejudiced reader will attribute entirely to the literary sympathies of Colonel Hamley—in the Wellington Essay, I say, the writer lays down most distinctly that from Prussian practice alone no real deductions can be drawn. They adopted a system on the spur of the moment, which was never severely tested; for “the motley and demoralised host” which surrendered at

Sedan was scarcely in reality more formidable than the raw levies whom the Germans had subsequently to meet. But it will be best perhaps to take some portions of General Thesiger's paper in their proper order. Throughout, I may remark, General Thesiger quotes passages from various writers which, separated from the context, appear favourable to his views, while those who are acquainted with the works in their entirety know the completed argument is wholly adverse. He commences by quoting from one of the Wellington Essays an attack upon the line without modifications; and repeating the author's words, takes him to task for attacking the line modified by sixteen sections of the Field Exercise. How many of those sixteen sections did the Light Division employ against the great Redoubt? There is an end to all argument if the line advocate cries—"Why do you abuse my line? It is only the bits of a column put side by side:" and the column advocate—"Why do you abuse my column, it is only the bits of a line put one behind the other. We can alter it to please you." There is nothing to do but shake hands over it as the writer of this paper does with the Wellington essayist in the next six lines, confessing that the Alma line, which was meant all the time, does require serious alteration. General Thesiger then concedes lying down, advancing by rushes, loss of touch, brings the line to the skirmishers instead of the skirmishers to the line; increases their number, and save in a few points, which I propose to discuss, gives all that moderate men have ever asked for. If after the campaign of 1870 the authorities had "fully recognised the necessity for great flexibility and elasticity," and tried to "bring out the full power" of the line, we should have heard less nonsense talked; but the United Service Institutions of England, which argued calmly at first, at last went raving mad about order in disorder, skirmisher swarms, and organised swashbuckling. At the close of the manœuvres of 1871, a critic less known to the world than either Hamley or Chesney but one endowed with a genius equal to either of them wrote:—"Nothing can be more opposed to the infantry tactics which have so lately earned victory than the leading and the movement of the well-drilled battalions which took part in the manœuvres."

In 1872 certain Commanding Officers, on their own responsibility, trained their regiments to a few movements on the Prussian model: and just before the autumn manœuvres an able lecturer and scientific officer, wrote in grief to inform me that it had all been put a stop to; there was to be nothing but company skirmish, company support, advance in line, and volleys by command. But at the end of 1872, six years after Sadowa, the authorities surrendered with a precipitation equal to their previous obstinacy, in

time to give us at the Camp of Exercise the unmitigated sprawling over the country, which has excited the Adjutant-Generals very natural disgust. But his protest comes too late to do more than make the new school, as I hope it will as far as Indian influence can affect the battle already nearly fought out at home, moderate in their victory.

General Thesiger's arguments, as to what fire we have to consider from 800 yards until collision, are very closely reasoned, and his remarks on unaimed fire most valuable; but their real weight is not so overwhelming as would at first appear. General Thesiger would probably accuse me of quibbling if I said his advance is not a two-deep line. The number of skirmishers is now so large that either it is not a two-deep line at starting, or during its advance it ceases to be one. I do not care whether skirmishers are detached from flanks of companies or sections,——and indeed, what with gaps between companies, and loose files, there is such a strong resemblance in what General Thesiger recommends to the skirmisher swarm, that I am surprised he attacks it so severely. It is impossible to argue wide questions in a narrow and rigid manner. A complicated problem in dynamics cannot be treated like an early proposition of Euclid. The ground is almost entirely excluded from the writer's argument, and depth of formation cannot be treated as a mere question of fire danger. High authorities consider it is demanded by considerations for which even fire danger must be ignored; the power to develop and resist rapidly flank attacks is now held of vital importance. Moreover, it is well-known in practice that the fighting line draws on itself all the aimed rifle fire; distant bodies, which suffered severely until the enemy's attention was occupied, have been known, when the front fight was hot, to stand unnoticed, unharmed in the open owing to the unconquerable human habit of hitting back at the nearest adversary. All the advantages therefore are not in favour of having more troops in one line than can profitably join the fire fight. Until experiments have been made (something of the kind, but not quite what I mean, was tried at Chalons) by a line of men firing rapidly, some carefully, some at random, on the front line of a succession of targets, so distributed over a width of say 400 yard, and a depth of 800 yards, that every shot might hit a target but no shot two—a matter easily arranged—and then careful diagrams founded on the trajectory, drawn of the first 400 yards; no argument can be derived from unaimed fire. There is nothing whatever to prove to what particular kind of depth of formation unaimed fire is adverse. It has a law doubtless as unchangeable as the number of unaddressed letters posted in a year; but we don't know yet where and in what proportions

unaimed shot goes, but I shall be very much surprised if, on diagrams of the lines of danger being drawn perpendicular to the paper, and diagrams of troops horizontal, it be found that on flat surface even a double line drawn through the worst zone of 25 per cent of aimed fire, gets less shots than the same two lines distributed in certain proportions over the 400 yards from the front target, with only those able to fire back on the worst of it; but if, by a very simple use of the plane and the trajectory obtained from the flat surface experiments, various representations of undulating ground with the lines of danger be drawn, and certain small obstacles distributed over it, I shall be still more surprised if the result shews that a two-deep line swept over the whole ground nets less shots than orderly groups with orderly reserves moving, within fixed limits of course for each unit, sometimes in line sometimes in column. I shall be surprised if the line moving always at the double, and therefore halving the shots, nets less than the varied advance moving at a walk and skilfully manipulated.

Without any special experiments, by use of wide movable targets, on open ranges, behind the target fired at, especially with troops on their early instruction, a good deal might be learnt about badly aimed fire. All we yet know is, it goes high and to the left. If we could discover that intensity of fire decreases regularly from the fire front, we should know that all but the firing line should be kept as far back as was safe; but if we could prove what is probably near the truth, that beyond a certain zone before and behind the engaged line chance shots fall pretty equally, then we have everything to gain by pushing up supports and reserves as close to the deadly zone as possible.

But the law of unaimed and random fire we may never know.

Meanwhile we must appeal to rough experience. The Prussian regulations say:—"The division pushed forward to subdue the enemy's fire must seek special aid in a skilful use of the ground, and they will find almost every where frequently, even in open ground, appearing quite level, an inconsiderable fold which will give cover to the skirmishers lying down and even to the closed divisions." This is the Prussian advice after long and bloody trials.

At Le Mans, Captain Brackenbury tells us:—"The fire of the French was so awful that it was perfectly impossible for troops in any formation to live under it. The only way in which the Prussians did live was by advancing in very loose order, by throwing themselves down, by dodging behind every hedge and bank, by assembling in groups behind a house or little hill, and creeping on bit by bit as they could." This is the evidence of a skilled eye-witness, and the weight of evidence goes to prove that, while acknowledging fully in very many situations the two-deep line in open order moving rapidly cannot be improved on, all

formations of the rake and roller type long continued, which forbid skirmishers to swerve, which discourage lines breaking into small columns are disadvantageous ; it does not make the slightest difference whether you use one long rake or eight small ones, whether they move in line or in echelon ; it is perfectly plain the whole ground, good and bad, is swept indiscriminately at last.

The type of advance, which the new school of tacticians aims at, is that of a rising flood which, here a thread, there a stream, ever presses on between obstacles or, if for a space stopped by a rock, pauses a moment and then pours round the flank, and once more resumes its advance. Are the principles of order so utterly unattainable in this system that we must reject it ? General Thesiger certainly does not in spirit, though he strives to appear to in the letter. At the critical moment, General Thesiger maintains, his two-deep line moved up to the skirmishers will be in perfect order. Now his system allows numerous skirmishers, and a gap on one or both flanks of each section. Supposing the numerous skirmishers sustain no loss, and the line sustains no loss, even suppose the skirmishers walk perfectly straight, and the line after them, will all the little bits behind fit all the little bits in front ? I doubt it, but supposing both skirmishers and line decimated, and that in addition the skirmishers of one section have swerved 20 yards to the right, another 10 yards to the left, there will be a good deal of mess I imagine in the dovetailing ; but granting a loose line of skirmishers could keep distance not only from end to end, but at many intermediate points, surely there is this vast difference in "reinforced line of skirmishers" (reinforced skirmisher swarm it should have been here) "and the two-deep line," that the reinforcements have picked their way, the two-deep line have not. The difference between using the stepping stones and fording the stream, between using the crossing and defying the mud, is shown plainly enough by our boots ; and what if it be true as Colonel Williams says in No. 69 of the English papers "It is vain now to talk of any better line of front, if a perfect line could fall from the skies and find itself near the enemy, it would quickly assume the shape of a skirmisher swarm."

The general principles regarding the advance of skirmishers are admirable, and I think such movements as advance in right echelon, in left echelon, pointed echelon, and hollow echelon, words which explain themselves, might well form part of skirmisher training ; but it is not to be supposed that rule will be adhered to in the heat of fire. The principle, however, that some should always be firing while the others are advancing can be inculcated, but a line of skirmishers formed, as is proposed, by individuals from 32 different sections, then divided into four great divisions (and how commanded, General Thesiger does not say), I

cannot believe would form a fighting line with either much mutual confidence or enterprise; or be able to reconcile in the heat of the fight its allegiance to the four great divisions it is in, and the 32 sections it has to keep in front of, at the same time. General Thesiger's plan for getting over the last final difficulty has, I fear, a savour of the drill on a small scale in the barrack square, and an obliging enemy crushed by the cross and oblique fire of the over-lapping victorious battalion, what place in a line of fire extending for miles would there be for the two devoted flank companies of a single battalion unless favoured by some wavering of the enemy's line or some peculiarity of ground not necessarily in front of the flank companies? The Prussians are at present practising (Colonel Newdigate at the U. S. Institution) for the final rush, pushing the main body of the company through the centre of the skirmishers; but making a rush through the firing line, is a very different thing from deliberately moving out troops diagonally to the right and left front between the breech-loader duel at its hottest. A battalion occupies a front of, say, 400 yards; a good many more places than two must be liable to turn suddenly into the hydra's head in that distance. Nay more, to drag after them, over favourable ground and in any decent formation the remainder of the battalion. Quoting freely from Captain May the writer claims by inference that the line is free from confusion in retreat; but in this respect the superiority of the line over the other formations is supported by no evidence. The light division, originally in line, advanced in confusion, and fell back in confusion on the Brigade of Guards, also in line, at the Alma, and swept away an entire battalion; the remainder opened out and allowed the retreating line to pass, which goes to prove that had the Brigade of Guards been in four ranks with intervals or in small columns, the Scots Fusiliers would have remained intact. In retreat confusion is inevitable; and the line, either in first line or support, has no exemption from its evils. Again quoting from Captain May, General Thesiger claims for the English battalion system a superiority in the prevention of straggling, but on this point there is really no valid argument whatever. Surely whatever the defects of the Prussian system, it is not true that it "diminishes the supervision of troops" under fire. One glance at the diagram of a Prussian company is a sufficient answer to this. General Thesiger, although he casually mentions "individualised method of fighting," and uses freely Captain May's work, has nothing whatever to say on the main subject of the author he quotes so much, whether a regiment is to consist of a Colonel, an Adjutant, and 800 others, or whether, as Captain May wished, everybody is to disappear but the Captain. This question of the gradual massing of sections into half companies,

double company (the equivalent of the Prussian company), wings and battalions, and their respective commanders, and duties, is not entered into sufficiently and is inseparable from an exhaustive consideration of battalion tactics in the fire fights of the present day.

Again General Thesiger, quoting Essay No. IV says :—"The skirmisher swarm formation entails firing over the heads of the troops ;" but General Thesiger is advocating advances in line himself. If he is only going to cover the head of his echellons with skirmishers, he is going back to the old system of shock tactics ; if he covers his whole line and makes a fire fight, their heads must be fired over too, whether we call them a line of skirmishers or a skirmisher swarm, but curiously enough the author he quotes from is again one whose general arguments are totally adverse. Sir Garnet Wolseley says :—"It would be well to accustom our foot soldiers to manœuvring with calmness, whilst a fire of blank shells was kept over their heads ; even if a few lives should be accidentally lost in doing so, they would be well expended if your infantry acquired perfect steadiness under these circumstances." And speaking of two ranks, "jamming men together, shoulder to shoulder and toe to heel in two ranks," "multiplies the loss of life when they are exposed to fire." The witnesses selected are decidedly bad witnesses for the prosecution of poor skirmisher swarm.

I have carried this review to such length, that I must omit any discussion of General Thesiger's remarks on drill and manœuvring as they stand somewhat apart from the immediate subject of controversy ; but it was necessary to analyse with care portions of General Thesiger's paper, because from General Thesiger's position and the expectations raised by his promised paper, it has gone abroad that a successful defence of the British as opposed to the Prussian system was about to be published, and because from the excellence of the paper there is an impression that the defence has been completely successful. It is therefore necessary to point out that the excellence of General Thesiger's paper lies in the acuteness with which certain portions are pleaded and the sensible general remarks, but not in the logical continuity or success of the main argument ; it is not a defence of the British line of Aldershot field-days against the last system of the Prussian drill-book, but an unfavourable comparison of one of the worst points of the Prussian system, the skirmisher swarm, exaggerated, with a scheme of General Thesiger's own containing a *soupeçon* of the old British line, but perfected by appropriation of many other portions of the very system he is attacking.

To those who are acquainted with the history of the contest that has been going on since, after Sadowa, Major Adams fluttered the old school by announcing the close of the era of bayonet tac-

tics ; to those who have been steeped to the lips in the appalling flood of military essays and discussions that has been poured out since ; or to any one possessing naturally a careful habit of analysis, it is not necessary to point out how much General Thesiger borrows from the system he is attacking and appropriates to the system he is defending ; but to those who have not carefully studied the paper, or who have only heard of its results, I may point out that the old system—when, as Boguslawski remarks, it didn't much matter whether guns were fired or not at any but close quarters—was to send forward a sprinkling of skirmishers who were mere cavalry feelers ultimately withdrawn, behind them at a walk in one line shoulder to shoulder, order being every thing and rapidity secondary, the British line advanced to the shock. I am speaking always of the Guards Aldershot-system as opposed to the light division tactics discussed by Colonel Gawler and Sir William Napier. General Thesiger, although sentences could be quoted showing that his mind is still running on the old shock tactics, accepts the principle of a fire at once established increasing in intensity till one side can bear it no longer ; instead of the skirmishers coming back to the line, the line feeds the skirmishers who are the battle, and ultimately joins them ; rapidity is considered of equal if not superior importance to order ; touch is abandoned, and the line is broken up into pieces. Under these circumstances, I feel justified in saying that though General Thesiger's paper contains many admirable suggestions and is well worthy of careful study, its title is eminently calculated to mislead ; for the distinction between the 'radical changes' General Thesiger deprecates and the "important changes" he accepts is mere hair splitting ; and his plaintive "really" is calculated to produce an impression, that the agitation for reform which has won all General Thesiger concedes was quite uncalled for. The text of the essay honours the new system, the title is far from it ; but it is hardly fair to reject the play and steal the thunder, and I have considered it necessary to give at considerable length my reasons for a loud protest of *sic vos non vobis*.

There is not much advantage gained by going through the greater part of an essay and merely saying—with this I entirely agree : I shall not, therefore, devote much space to Captain Adams' article. It is one of many systems suggested for adapting our tactics to the requirements of modern war. The necessity for a radical change being once accepted, the form in which it should be carried out will prove simple. I submit a few "notions" of my own. We already acknowledge that the order of companies is a matter of indifference. I think it should also be a matter of indifference whether one company supports another by coming up on its right or left in double rank, or by coming up in single rank in its rear. I attach no value whatever

to differences of colour in uniform as giving one large body over another superior safety from fire ; but I do attach great importance to officers in a regiment being indistinguishable from their neighbours from the front, and conspicuous from the rear. It is an evident truism, although it sounds strange—that, since supports come up from behind, and men follow their leaders, the proper place for distinctive badges is the back which the enemy is supposed never to see. But I do not require facings to be reversed. The pouch belt will serve my purpose. At reviews, where ladies or foreign officers are present, let officers and men wear any facings, belts, or gold lace they fancy ; but in action, for Infantry, I suggest the following :—Officers, white pouch ; marksmen, black, with a bar or cross the color of the regimental facings painted as we see on leather portmanteaux—the two outer sections black—the two inner, common brown leather. Both the men themselves and supports coming up would have a simple means of distinguishing the leaders flanks and centres of every company ; for I think the arrangement of the men by size is one without any object. Let men stand in companies in the order of their shooting from the flanks inwards, the marksmen on the extreme flanks, as it is useless placing a man in the firing line at 1000 yards who cannot hit the target at 400 ; he might as well go another 200 yards out of danger. Let then, the marksmen occupying the front of attack assigned to the company commence the ball, supported by the shooting sections, and ultimately the shock sections filling up the centre as they advance ; and let it be understood, subject to all necessary exceptions,—that to compensate the marksmen for their longer exposure, the final rush is to be made by the Shock Sections under their fire. Let there be a clear understanding. In the absence of other orders the yielding is always to be from a given flank between Regiments, Companies, and Sections ; that, as a general rule, at long distances the centre sections yield to the outer ; and if there is crowding, are withdrawn in succession by their Sergeants ; at close quarters, the outer fall back in support :—but I must not drift into writing a drill book. To return to Captain Adams :—the best feature of Captain Adams' paper is that portion where he dispels the delusion that Britons never fought except in line, as the very arrow head of the Wellington Essay was that passage where the author says :—“ No one would be disposed to accuse either Prince Frederick Charles, Boguslawski or Captain May of enacting the part of Mr. Puff. But, with reference to many of their admirable suggestions, *the same idea occurred to two men*, and an English Light Infantry officer *thought of it first*.” By all means let us retain what is good in the line formation ; but let us not run away with the notion that that imposing product of 40 years' peace—the slow march of the Guards at St. James's moving like a wall and

wheeling like a gate, is the only way to win battles, or the type of our tactics, when Wellington was at his brightest and our Light Division at its best—faultless for defence—"an attack in rigid line, except for short distances, never was possible against properly posted enemies, and attacks never can now, except under the rarest circumstances, be restricted to short distances."

Captain Barnes' pamphlet has been reviewed already elsewhere at a length out of all proportion to its importance as a contribution to military literature; and after what I have said about the suppression of zeal, I shall not stultify myself by indulging in ill-natured criticism. Still, although I only purpose expressing my dissent from the author on one matter of opinion, I must do so in several instances in matters of fact.

Captain Barnes thinks the drill of the Cavalry was perfection: to that idea I have no objection; but he adds that he saw no blunders (serious) committed. Equally competent observers saw a good many; not, I will say, in the 10th Lancers. Captain Barnes says no fighting on foot was attempted at the Camp. He is mistaken. One Brigade certainly was practised in dismounted skirmishing—as the victims will probably not soon forget. Attack also was assisted by dismounted Sowárs; and, if Captain Barnes says these instances are not what he means, I may add, in Sir Henry Tombs' attack, Gondal was held for a time by dismounted skirmishers. Captain Barnes labours under the entirely false impression that the 10th Lancers was the only regiment at the Camp which possessed an organised system of scouts. Various other regiments had selected officers, selected men, and selected horses told off for purposes of scouting. I could name several gentlemen who will feel very much astonished at Captain Barnes' statement.

It was scarcely worth while printing the title "Reconnaissance," when Captain Barnes has so little to say on it, and when that little makes one ask if he rightly understands the meaning of the word. That men went out and made pictures, that one regiment played ostrich near camp, and another came up and said 'I see you,' is quite correct. But there was not a single attempt to discover the strength and position of an unknown enemy, under war conditions, during the real fighting, as a preliminary to the attack; and it is evident, with operations commencing at 10 and ending at 4, such a thing as a Reconnaissance was impossible. Captain Barnes says he did not see a single instance of a surprise. It is not easy to surprise men at 10 in the morning; but I think some people would be inclined to consider the occupation of Gondal by a force of unascertained strength, and the subsequent capture of Dakner—the roads of which are quite practicable for small parties of Cavalry—was a

surprise on a large scale. I do not say who was to blame. The one matter of opinion on which I think it necessary to express dissent from Captain Barnes, is where he says that regiments are to pay no respect to the ground assigned to regiments on their flanks, even should they report all right, but to send their own parties beyond them. This is a principle which cannot be allowed to pass unchallenged. It simply means this :—The Commander of the outposts has given you certain ground to look after—and us certain ground ; but we have so much spare ability and energy that, as we can't trust you to do your part of the business effectually, we intend to look out for ourselves in your ground as well. I hope that outposts who find the scouts of other regiments, armed with no higher authority than their Regimental Commander's, intruding on the ground assigned to their charge, will stop them as strictly as they would those of the enemy. Division of labour, subordination, and mutual confidence are necessities of armies. Principles like those I censure, carried to logical conclusion, would allow each regiment to send a delegate to the Head-quarter's Staff to look after their particular interest, and see also that the campaign was being properly conducted.

Captain Barnes is very hard upon the camp correspondents, and he certainly is right in saying the last camp produced nothing so clever, and I may add so personal, as the Sunday letters ; but, in the diary of Beechwood of the "*Englishman*"—although, I confess, I have read more picturesque description in Russell, and more weighty criticism in Hozier, I find a very fair amount of liveliness, common sense and accuracy, and an untiring energy and capacity for note-taking very creditable, viewed from the daily newspaper point of view ; but in reprinting with malice aforethought his letters as they were written, without either adding to or condensing them, I think "Beechwood" has not quite given us what is wanted, and has exaggerated the importance people attach to such ephemeral productions. Indeed, even if we consider General Thesiger's paper as—what it undoubtedly is—a product of the last Camp, the whole literary outcome is not very great. A really exhaustive paper on strategy and tactics *à propos* of Indian Camps and their results, has yet to be written ; and I recommend, as a model to those who aspire to supply the want, *A Retrospect of the Autumn Manœuvres by A Recluse.*

N. L.

ART. IX.—THE RE-ORGANISATION OF THE INDIAN MEDICAL DEPARTMENT.

IT is a statement older than any system of political ethics that “the benefits of an institution for which all are taxed ought to be rendered as accessible as possible to all.” That the Medical is furthest from attaining this end of any department in India, few of its members will care to deny; as at present organised, it represents a maximum of expenditure with a minimum of practical usefulness. There is a vast reserve of skill and energy among its members which is allowed to lie fallow, and which does not, by so doing, gain strength for more fruitfulness but rather deteriorates into greater barrenness. That the expenditure and skill thus misapplied might be spread over a vast area and benefit the millions under our rule instead of its being concentrated upon ourselves and our native soldiery, is the object of this paper. The proposals that I have to submit to your readers will not involve additional expenditure; indeed, with the inelastic resources of this country it is impossible to do much more than has been done to provide medical relief for the masses. To do so a radical change in the system is necessary.

No one will dispute the assertion that the medical service has had a history worthy of our common country. In professional knowledge, energy, courage, and kind-heartedness, its members have been very even representatives of our countrymen in the East; and that the service requires re-organisation is only due to the fact, that much of the work which, a few years ago, only they could perform can now be done efficiently enough by native agency at a fourth of the expenditure.

In introducing radical changes, there is always a difficulty involved, when the initiative occurs with the governing and not with the governed body. But in introducing the measures I have to propose, the *odium medicum* will assuredly not be incurred; inasmuch as for the last dozen years the present system has been found to be expensive and unsatisfactory, and the representative men of the service have been anxious for a change which would afford more scope for the exercise of their profession.

Briefly stated the proposals which I would venture to suggest are the following—

Sub-Assistant Surgeons to have medical charge of native Regiments; and with the reduction of expenditure thereby attained, provide—

I.—A Garrison Surgeon to every military station, however small, who would exercise a general supervision over the Native Sub-

Assistant Surgeons, and at the same time be available to attend upon European Officers and their families; and in addition to these, a Staff Surgeon for the head-quarters of every Brigade and Divisional Command.

II.—A sanitary officer to every civil division, and,

III.—A native doctor to every tehsil in the Bengal Presidency.

To non-medical readers it may seem a startling innovation to place natives in medical charge of regiments, but medical men who have come in contact with Sub-Assistant Surgeons professionally, will ungrudgingly admit their fitness for the charge. I speak from a pretty wide and not unobservant experience when I state, that to reserve a European Medical Officer to a native regimental hospital is a waste not only of State money but of his time and professional knowledge. In regimental practice the range of disease is narrow, and in an incredibly short time the Surgeon finds his practical experience becoming a thing of the past. It is well known—and no one will more readily admit it than a regimental Surgeon,—that the most inefficient men professionally are, as a rule, those who have been for years simply in charge of a regimental hospital. So much is this the case that few who desire to excel in their profession care to remain longer than they can help with a Native regiment. The medical practice is neither large nor varied; except in August and September (when the fever period reverts) the sick of a regiment varies from 25 to 30 as a daily average, augmented in January and February by a number of old malingerers who suffer from lumbago and kindred ailments in order to pass the annual invaliding committees. Fevers, diarrhœa and blistered feet form nine-tenth of the diseases, and from the similarity of living, general habits, and constitution of native soldiers, any thing beyond routine practice is not ordinarily required. This the native doctor even, can supply as well his principal; and it is usually delegated to him. It is only on very rare occasions that mysterious ailments and complications occur, which try the better trained acumen of the European. In the great majority of cases the medical officer finds half an hour a day ample for the requirements of a regimental hospital, and for the rest of the day “dull care and duller time” must be driven off as best he may. Some years ago, in order to create a fictitious, in what had little inherent interest, a circular from the highest administrative authority enjoined medical officers to spend at least two hours a day in hospital. This as it deserved was more honoured (and more observed) in the breach than in the observance,—the very necessity for the injunction showing the hollowness and futility of the system.

That the saving would be immense by substituting Native Sub-

Assistant Surgeons I shall now proceed to show. In the Bengal Presidency there are on an average, excluding the administrative grades, 98 medical men attached to the army. At the average rate of 700 per mensem this represents an expenditure of 68,600 a month or upwards of eight lakhs a year! Nothing need have been said, if the necessity for it had been commensurate with the outlay, as was the case some ten years ago; but as I have shown that the work could now be performed efficiently enough for about 15,000, there seems a heavy responsibility for needlessly expending money wrung from, perhaps, the poorest tax-payers in the world. In order to make natives efficient substitutes they must be well-selected, well-educated, and better paid. For the first seven years I would have them styled Sub-Assistant Surgeons and paid Rs. 100 per mensem, for the second seven years, Assistant Surgeons and paid Rs. 200, and for over fourteen years' service, Deputy Surgeons and paid Rs. 300 per mensem. They would not require native doctors as they would reside near the hospital, and thus 100 additional men would made be available for tehsil dispensaries.

European medical attendance must be provided for officers and their families. The diversity of race and of the social up bringing of natives renders it imperative to appoint a Garrison Surgeon in every military station where there is no Civil Surgeon. He would exercise a general supervision over the native subordinates, check and transmit their returns and be available at the same time to attend upon European Officers and their families. Staff Surgeons would be required in addition at Brigade and Divisional commands in case of field service. I have calculated that Garrison and Staff Surgeons would absorb about 45 of the number I have previously referred to; leaving over 50, or with the addition of vaccine Superintendents about 65 men.

Of these I would appoint 30 as Sanitary Officers, one to each Civil Division in the Presidency—in the following proportions

Bengal	...	...	...	11
N. W. Provinces	...	...	...	7
Panjāb	...	...	...	5
Oudh	...	...	...	4
Central Provinces	...	...	...	3

The expenditure involved in the remaining 35 would, in addition to the 100 native Doctors relieved from regimental work, provide for a native Doctor to every Tehsil from Peshāwar to Cuttack and from Nāgpur to Assam.

A curious contrast is afforded between the areas supervised by English and Indian Sanitary Officers. A Rural Sanitary Board in England advertises for a Medical Officer of health to give his exclusive attention to a district comprising some 281,000 acres

and a population of 59,000. The Sanitary Commissioner of the North Western Provinces is expected to supervise the Sanitary arrangements of a Province containing 83,000 square miles and a population much higher than the whole of the United Kingdom. Truly the harvest is great and the labourers few! The Sanitary Department as it exists, is anomalous even in India. A number of heads, doubtless very wise, but without bodies or members. Recognising the many insanitary abuses that existed without check—instead of reorganising the whole department and bringing it up to the requirements of the country, the Government adopted a “policy of patchwork” by appointing one Sanitary Commissioner to each province. Dirt, ignorance and disease coming on like a tide and one man to cope with it. Mrs. Partington of Sidmouth beating back the Atlantic with a mop, was nothing to this!

What is wanted is an extension of the system; to give a body and consistency to a disjointed head; and to make sanitation one of the main branches of medical administration and not a mere parasitic growth, as it is at present. Without additional expense as I have shown a “Sanitary Officer” could be appointed to each Civil Commissionership in direct subordination to the Provincial Sanitary Commissioner; who ought to be Medical Secretary to the local Government, and be in turn subordinate to a Director General appointed with the Government of India. The duty of the Sanitary Officers would be to supervise the Tehsil Dispensaries, and vaccine department, and to personally visit the localities (whose name is legion) which are chronically infected with fevers and cholera. The Civil Surgeon is for the most part tied to the Sadr Station. He is daily referred to in criminal cases; has generally executive charge of the Jail; ladies and children require his constant presence if not his professional services. The Sanitary Officer on the other hand would be free to go on short notice whenever his services were required either to supervise local Sanitary measures, or, an equally important point, to investigate the origin of, and conditions attending, local outbreaks.

The present Sanitary Commissioner is not the only medical anomaly in the country; the Civil Surgeon forms a “good second.” Partly under civil, partly under military supervision, he shares the fate of the man who sat between two stools. When, for example, he conducts a postmortem examination, he must in the first instance send a copy of the case to the local Magistrate—another is to be sent to the Deputy Surgeon General of his circle, a third to the Sanitary Commissioner, and, if the subject has been previously under medical treatment, a fourth would be sent to the Inspector General of Dispensaries, who is also Inspector General of Jails with the supervision of a daily average of 20,000 prisoners on his

shoulders! Truly wonders crowd upon one who enters upon the details of our medical administration! The many and circuitous channels provided for communication with their superiors involve anything but an economical expenditure of "time, temper and stationery."

As if in this vast country with its teeming millions, its morbid conditions of a tropical climate, bad water, and the dirt and disease engendered by poverty and ignorance, there were not sufficient work to be distributed to each without treading on his neighbour's heels, the Government has given ample opportunity for an indulgence in that pastime. Heinrich Heine's distribution of external nature into things that could be eaten, and things that could not be eaten, had at least the merit of an incisiveness which this classification does not possess..

The vulgar proverb of too many irons in the fire requires no better illustration than the labour devolved upon the Inspector General of Jails. Able as he may be, and certainly is, he must be more than human who could efficiently supervise the details connected with the discipline and financial management of over forty Jails, containing 20,000 prisoners, in addition to about treble the number of Dispensaries, large and small. The watchful care, the minute investigation into details, and the correspondence that so many jails involve, are of themselves sufficient for the ablest intellect and most persistent energy. Ireland with a fifth of the population, has two Inspectors General of Jails in addition to local boards and inspectors. It is sanitation over again, the supervision considered necessary for a parish in England, suffices for a province in India!

The most advantageous part of the scheme proposed would be the establishment in every Tehsil of a native Doctor. This would bring the science and medicine of the West within reach of the masses. In cholera and fever Epidemics we make the police, the most detested class in every country and particularly in this, the dispensers of our medical relief. Policeman Rām Baksh would do less mischief if he were made to drive a railway engine than he does when entrusted with cholera pills (containing as they do, opium) in an Epidemic. "Masterly inactivity" would be a much better policy than the makeshifts we employ to soothe our conscience, when we find our subjects dying uncared for. It is only when Europeans go into camp that they become aware of the amount of preventible human suffering that comes to the surface, and which is so uncomplainingly borne that it almost requires to be sought for.

- That the people would resort to Tehsil Dispensaries there is ample evidence. In the district in which this is written a small branch Dispensary has been opened about a month ago and

already 290 patients have been under treatment. From the last report of the Inspector General of Dispensaries, N.W.P., I find, excluding Sadr Dispensaries, and seven pilgrim Hospitals in Garhwál which are exceptional, that in 1871, 88 branch dispensaries treated 388,687 cases or an average of 4,416 each, all these branch dispensaries being, be it noted, under the charge not of Sub-Assistant Surgeons but of native Doctors. If without incurring additional expenditure we could open up 600 Tehsil Dispensaries in the Bengal Presidency, it would be a fair average to state that over 2,000,000 patients would annually resort to them.

The political advantages of such a measure would be incalculable. The people who live near Sadr Stations are as cognizant as we are of the advantages derived from the British rule; but in the remoter parts of our several districts the policeman and the tax-gatherer are our only representatives; and never did Jews of old hate "publicans and sinners" more than they are hated. The simple villager will neither understand nor appreciate our vaccination and sanitary improvements, but it requires no civilisation to appreciate relief from physical pain, nor can the boon be misconstrued by the most jealous ignorance. It is no maudlin sentiment to say that we can find no means more adapted to win their adherence to our *régime* than by placing medical relief within their reach.

Some parts of the scheme which I have suggested must of course be gradually introduced; vested interests cannot be interfered with. But Sanitary Officers could be even now appointed, and the vacancies filled up in regiments by Sub-Assistant Surgeons, whose position in Dispensaries could be filled up by native Doctors until other arrangements were matured. The present Surgeon General ought to be appointed Director General, with two Secretaries—one Civil and one Military. The present Sanitary Commissioner and the present Secretary, two of the ablest men in the service, might be appointed respectively Civil and Military Secretaries to the Director General under the new organisation.

Will it be believed that because the Sanitary Commissioner has an office independently of the medical department, that an extra printed copy of every weekly and monthly sick returns must be sent to him by regimental Medical Officers, and that on these his statistics are founded? If the expenditure in India had been as closely scrutinised as at Home, this unnecessary item would soon be cancelled. This is only one example of the disadvantages of having a number of channels running closely parallel, when one main channel would serve a better purpose, and serve it more economically.

I have merely outlined the scheme, and that roughly. If the reorganisation of the service were undertaken by Government, those to whom the fiscal arrangements of the country are entrusted, would be better able to fill up the details. I may, however, return to the subject in a future issue of your *Review*.

3rd September, }
1873. }

J. M. G.

ART. X.—ON METHODS OF OBSERVING INDIAN PHENOMENA.

IN one aspect the history of British India is the history of a series of giant difficulties triumphantly overcome. With the exception of the period during which Lord William Bentinck was Governor-General, every decade from the days of Clive to the days of Sir John Lawrence has been marked by wars and victories. If the genius of Dupleix at one time rendered probable the formation of a French Empire in Southern India, the dreams of French supremacy were scattered to the winds when the defeat of Lally at Wandewash was followed by the success of Coote at Pondicherry. Before our first serious contest in India had been decided in our favour, Plassey had been fought, and Clive had laid the foundations of the British Empire in Bengal. Scarcely had we asserted our superiority over the French in the Carnatic, when Mysor threatened to force us to abandon the position we had gained. In 1767 Haidar Ali dictated peace under the walls of Madras. Before the century had closed Seringapatam had been besieged twice and had been taken twice; and Tippú Sáheb, the son of our ancient enemy, had been shot through the head by a British soldier in the gateway of the fallen capital. In 1775 began the long contest with the Mahrattas which was not ended till the glorious campaign of 1818 under the auspices of Lord Hastings. At one sweep the Pindári bands were dispersed, and the death-blow was given to the power of the Peshwá. Our enemies, however, were hydra-headed; and as each was destroyed, a new one arose. Burmah twice insulted the British Government, and paid for her temerity by the cession of Assam, Tenasserim, Arakán, and Pegu. Afghánistán inflicted a disgrace upon our arms which was only partially redeemed by the bravery of the "Illustrious Garrison" of Jalálábád; but which, like our other troubles, was destined to have a speedy end. The murder of Sir William Macnaghten and the massacres in the Khurd Kábul Pass were avenged when the Army of Retribution razed to the ground the great bazár of Kábul. Then followed the succession of insufferable provocations and victorious campaigns which stretched the boundary of British India beyond the Indus. We annexed Sind. We annexed the Panjáb. Other annexations of a different type succeeded these. Berár and Oudh became part of the dominions of the Company. Last of all, the moment when the empire had reached its greatest extent was the moment of rebellion. Rebellion had to be chastised with an unsparing hand. We had to fight and conquer the army that had fought and conquered for us. Our last victory may have been the

addest, as it was certainly the most hardly won. But it was absolutely complete as any that had preceded it.

Military difficulties were but a part of those with which we had to contend. Before a sepoy had been drilled or a British battalion had manœuvred in India, Oudh and Bengal had shaken off the yoke of Dehli; and the dominions of Holkár, of Sindia, of the Gaikwár, and of the Nizám had become practically independent principalities. The Indian substitute for International Law, the allegiance of the various governments to the throne of Dehli, had every where lost its original vigour. Nor was there more integral order than there was international security. The raids of a nation of freebooters and the turbulence and tyranny of native rulers, left to the heirs by right of conquest of the suzerainty of the Mughuls a legacy of intolerable anarchy. We had to rebuild the fragments of a shattered empire; and each fragment, as it was incorporated in the structure we raised, had to be moulded into a new and finer shape. As province after province successively fell under British rule, we had again and again to win the confidence and aid of conquered princes; to discriminate between mischievous and wholesome usages, destroying the one and strengthening the other, to stamp out crime; to establish property upon a solid basis, and to construct upon our own principles an organised government. We had also to assert our paramount power as the bond between the nationalities of India. The stupendous task has been accomplished. Many as are the faults of Indian Government, India is now more peaceful than Europe. In India life and property are as secure and the course of justice is as regular as in any of those Western countries whose civilisation is spreading to the Oriental subjects of England.

Amid this profusion of incident and amongst the pressing necessities of an ever-growing administration, the formation of a large leisureed class was an impossibility. Men came out to India not to study but to act. The wonder is not that very little has been done towards the interpretation of the various forms of Indian society, but that there have always been some few Englishmen in the country who have found leisure and energy to learn and to record something more than can be acquired through the ordinary experience of routine or the occasional excitement of emergencies. Yet it is perhaps still more strange that the earliest Indian students could have been a school of literary antiquarians. We might be supposed that the urgent wants of those who had to conquer a country with the geography of which they were by no means perfectly acquainted, and to govern nations of whose institutions and character they were entirely ignorant, would have directed the course of investigation. To some extent, indeed, the choice of studies was influenced by immediate administrative needs. But

whilst Indian soldiers and Indian statesmen were conquering provinces, and making the best shift they could to extemporise governments for foreign nations, Indian students were inquiring whether chess originated in India, whether Pataliputra, the capital of Sandrakottus, was Patna, or some other place, and what was the exact character of the Indian and Arabian divisions of the Zodiac. Horace Wilson was writing a Sanskrit Dictionary and a Hindu Theatre. The Vedas were being ransacked for the records of a faded faith. The first Indian students, instead of delineating the strange society that was before them, were looking to the Institutes of Mann for an almost certainly untruthful picture of the India of two thousand years ago. It will be seen how fortunate a circumstance it was that Oriental study took this bent. These researches at first sight so far removed from the practical exigencies of the time, were destined to supply the clue which assuredly will guide future statesmanship and future investigation.

Yet, how was it that these researches came to be made? Why were Sir William Jones, Henry Colebrooke, Horace Wilson, and their distinguished followers, scholars of literature and scholars of the literature of a dead language? The answer is that they brought with them to India the English ideas of their day. The education of an English gentleman in the last half of the eighteenth century and in the beginning of the nineteenth century was an education in classical literature. A person was entitled to be thought a learned and accomplished man not in so far as he approached to the type of a Faraday or a Huxley, but in so far as he approached to the type of a Bentley or a Porson. You might have been totally ignorant of the most elementary principles of every science, except mathematics. You might have been utterly unable to construe a line of Goethe, or to turn a single sentence of Dante or Voltaire into English. But it was absolutely necessary that you should have studied the *Æneid* of Virgil, that you should have been able to compose a neat exercise of Latin Elegiacs and to conjugate the Greek irregular verbs. The education of a man of the world was not distinguished from the education of a schoolmaster. If you had a minute acquaintance with Greek and Latin text-books, with Greek and Latin grammar, and with Greek and Latin versification, you had received 'a general education' and were left to acquire the rest of your knowledge in the rough school of life. Of course the indirect results of this kind of training were most salutary. No intelligent mind could be brought into contact with the masterpieces of ancient literature without gaining in pliability and strength. No one but a schoolboy of unusually dull perceptions could read Plato without imbibing something of the Platonic spirit, or Thucydides without attaining some insight into the scope and significance of political history. Now

but the coarse could fail to see beauty in Ovid, exquisite literary skill in Horace, and grandeur in Lucretius and Æschylus. But it has only lately become the direct aim of classical education to enlarge the mind by imprinting upon the imagination a vivid picture of the rich and varied life of the two greatest ancient societies, in the full vigour of their political activity, their æsthetic enjoyment, and their speculative power. The aim of classical education in what the late Lord Derby described as its "prescientific" period was to make good scholars in the University sense of the term. Its direct products were facility in purely literary criticism, thorough grammatical knowledge, and accuracy and terseness of style. The great monuments of ancient literature were valued more for their artistic excellence than because they preserved the records of the thought and movement of ancient civilisation. The languages of antiquity were prized rather as instruments of expression before whose symmetry modern speech seemed a clumsy contrivance, than as the means to unfold the histories of Greece and Rome. It was by a classical education of this type that the intellectual tastes of the first generation of Anglo-Indian students had been formed. On coming to India they discovered a literature as dead as Greek, and with far less influence on any existing society than the language of Justinian. They discovered verses which we are assured are as melodious as those of Homer. They discovered a language which is said to be unrivalled even by Greek in the flexibility of its grammatical forms, and in the susceptibility of its terms to the most delicate subtleties of meaning. In their minds learning was intimately associated with knowledge of the remote past, and more especially with that kind of knowledge of the remote past which is acquired by a literary critic and a grammarian. Sanskrit literature exactly met the inclinations which had been developed by the education of the time. If Sir William Jones and Horace Wilson had passed their lives in England as leisured country gentlemen they would probably have translated Virgil or Horace, or have edited one or two Greek dramatists, or have done part of the work of Jelf or Buttman or Donaldson. As it was, they fortunately saw in the study of Sanskrit an analogy to the study of Latin and Greek. They investigated and interpreted the Institutes of Manu and the old Sanskrit plays with that keenness of perception, that patience in research, and that accuracy and caution in announcing results which they would have applied to the fragments of the Twelve Tables, or to the choruses of Euripides and Sophocles.

In so far as Oriental learning retained its literary and philological character, its influence was wholly beneficial. There was, however, one application of the knowledge of Sanskrit and Arabic which

brought about mixed results. When the government of Indian provinces in every department was first thrust upon us, it became absolutely necessary that we should administer some kind of civil law. The mischief that would ensue upon a wholesale introduction of English law was speedily perceived. Men accustomed to the idea of a voluminous written law instinctively turned to the treatises of Hindu and Musalmán jurisprudence for the rules and principles which they felt their own system could not adequately supply. It is true that the Hindu legal commentaries and the traditions and digests of the Law of Islám may more properly be compared with the *responsa prudentum* of the Roman jurists than with the massive collections of English case law. But the earliest Indian administrators felt that they had the surest footing then obtainable in the existing law literature of the country. Warren Hastings, who was amongst the first members of the Asiatic Society of Bengal, ordered the compilation of a general digest of Hindu law. Two treatises on contracts and inheritance by Trivédin and Jagannátha respectively, were composed at the instance of Sir William Jones. He also suggested the translation of the Hediya by Mr. Hamilton. European authors vied with native lawyers in the elucidation of native law. Sir Francis Macnaghten wrote the "Considerations on the Hindu Law." Sir William Macnaghten wrote the text-book which is still the standard authority upon the principles of Hindu and Muhammadan Law. The exertions of the Macnaghten's were equalled by those of Sir Thomas Strange and Mr. Baillie. These works have profoundly influenced the course of justice, and have moulded innumerable decisions. With the experience of the present time it is easy to condemn as too facile the old dependence upon what may be called closet law. We now know that we have given to the rules of Hindu and Muhammadan Law a rigidity which they did not possess under native modes of administering justice. It is becoming the fashion to decry precedents, and to exclaim against the destruction of native customary institutions by our courts. We can see that the written law of the Korán and the Dharma Sástras and their interpreters is much further removed from the usages which actually obtain amongst the people than we had suspected. One of the best efforts of recent legislation has been the passing of the Panjáb Laws Act, which provides that in several large departments of law, including Inheritance and the Law of Private Conditions, the rule of decision shall be primarily custom, and that the strict principles of the Hindu and Muhammadan law shall only be applied in so far as they have not been modified by custom. The Oudh Laws Bill now before the Legislative Council contains a provision of the same type. It may be that the written law has been administered

with too much dogmatism and precision. But the first Indian statesmen had before them a choice of evils. They had either to invent new rules for nations of whose institutions they were consciously ignorant. Or they had to make the best of those written records of native law which were available. They chose the latter course. The harm which their choice may have occasioned may not even now be beyond repair. From the point of view of the student of law it is amply compensated by the fuller knowledge of two great legal systems which is already leading to striking discoveries in the field of comparative jurisprudence.

The year 1834 may be taken as the approximate date of a great change in the spirit and direction of Indian inquiry. It was in this year that James Prinsep published the results of the labours of Masson at Kábul and of Court and Ventura in the Panjáb. At the same time the battle between the Orientalists and the Anglicists was raging in Calcutta. The Orientalists advocated an Eastern education for the Hindus. The Anglicists urged the advantages of communicating to the East the benefits of Western science and literature. The former party had a formidable champion in Horace Wilson. The latter were led by Sir Charles Trevelyan and Macaulay; Macaulay was then a member of the Supreme Council and President of the Board of Education. His characteristic condemnation of ancient Oriental literature is well-known. "We are at present," he wrote, "a Board for printing books which are of less value than the paper on which they are printed was when it was blank, and for giving artificial encouragement to "absurd history, absurd metaphysics, absurd physics, and "absurd theology." The fact was that the phalanx of reformers who may now be said to occupy the out-posts of the defenders of the purely classical education of the old stamp had been advancing with rapid strides. The value of physical science as an instrument of education was beginning to be recognised. The growing faith in the methods of physical science was breeding an exaggerated scorn for intellectual achievements which had not those methods for their basis. There was as yet no widespread acknowledgment of the vast importance of Oriental antiquity to the student of language, to the student of mythology, and to the student of ancient law. Oriental scholarship was defended on the comparatively weak ground of the intrinsic excellence of Oriental literature. The time had not yet come when the effect of Oriental scholarship upon the philosophy of history and of society could be shown. Thus the Anglicists won the day. It was, perhaps, a consequence of the same intellectual movement that the school of literary antiquarians, versed in the Vedas, in the Mahábhárata, and in Kalidása, was succeeded by a

school of archæological explorers * who abandoned the study and the desk for the temple and the cave, and who left off translating Sanskrit texts to decipher the inscriptions on monuments and the legends of coins. There is not, it is true, a broad and definite line of demarcation between the literary antiquarians of the first fifty years of our rule and the field archæologist, as they are termed, of the second fifty years. Buchanan, a true field archæologist, surveyed Mysor, Bihâr, and Assam at the very beginning of the present century. Erskine wrote his account of the Elephanta Caves of Bombay in 1813. But as the distinctive characteristic of the first epoch was the scholarly interpretation of ancient Hindu literature, so the distinctive characteristic of the second epoch was the minute and careful exploration of buildings and localities. Detailed maps and plans took the place of vague or glowing descriptions. Observation was still directed to the remote past. But observation no longer consisted principally in literary investigations. The evidence examined was evidence addressed to the senses, the still existing relics of bygone ages, the coins of old dynasties, the votive tablets of buried generations, and the shrines of forgotten priests.

It is sometimes a little difficult to convince people who have no imaginative interest in the past that any practical good can come of digging up old brass and silver and pottery, of making out old alphabets which nobody ever uses, and of re-constructing old languages of which nobody living had ever heard. To such persons the enthusiasm of men like Prinsep and Kittoe is unintelligible. They can no more comprehend it than they could comprehend an enthusiasm for collecting old rags and old bones. They are apt to regard an archæologist as at best a kind of harmless monomaniac. Still even the least imaginative and most practical of mankind would scarcely venture to affirm that history is an altogether superfluous branch of human knowledge. If you condemn archæology as useless, to be consistent, you must believe either that history also is useless, or that history in the composition of which many of the facts attainable have 'wilfully been disregarded, is as good as history which is compiled from all the facts which can be obtained. To require that history should be written without the aid of archæology is to ask the historian gratuitously to fling away one of the best instruments of research within his reach. Archæology is the handmaid of history. It is the function of the archæologist to supply a most important part of the evidence upon which the history of antiquity is based. Nor is it political history alone that is indebted to archæological

* *Archæological Survey of India.* See Cunningham, C.S.I. Introduction, Reports for 1862-63-64-65, by Alexander, pp. VII and XIX.

inquiry. The discovery of the Bactrian alphabet was as great a boon to the philologist, as the translation of the inscriptions of Asoka was to the historian of India. The character of an age is imprinted upon its coins, upon its architecture, upon all its works of art. The sculptures of Buddhist shrines are fraught with meaning to the inquirer into the theological ideas and religious practices of the East. The generalisations of Mr. Fergusson upon tree and serpent worship may not be warranted by the facts produced. But the ingenuity of those generalisations and the care and caution which have been used in collecting the data from which they are, it may be erroneously, drawn—will always render them most valuable as a contribution to the study of the development of Indian religions. At the present time the observation of Indian phenomena would seem to be entering upon a new phase. Yet each successive phase in the methods of inquiry is intimately connected with that which preceded it. The old methods are neither abandoned nor superseded. They give birth to new methods, but the effort is not fatal to themselves. The field archaeologists would not have attained their success had they not been aided by the Sanskrit scholarship of the literary antiquarians. The study of Sanskrit is not now pursued in India with the energy and devotion of former years. The Orientalists have lost ground in this country. In Europe they have gained far more than they have lost. Chairs of Sanskrit have been founded in all the greater European Universities. The archaeology of India must have its permanent home in the land of the caves of Ellora and of the Kutb Minar. This study cannot be transported Westwards like the study of Sanskrit literature. The tide of scientific investigation is now turning from the past to the present, and the tendency is rather to seek explanations of the existing facts of existing Indian society in the analogous facts of other ages and countries, than to amass evidence for the purposes of purely Indian history. But of course the present of India cannot be thoroughly understood without the history of its past. Archaeology must contribute to make the wide and little explored desert of ancient Indian history, a known and traversed land. The current of archaeological inquiry is still a strong and fertilising stream. There is every reason to hope that its force and volume will in no way be diminished.

The recent change in the mode of observing Indian phenomena may be described by saying that the Comparative Method is being applied to the explanation of those phenomena. The first department of inquiry in which the methods of observation and induction were employed with a truly scientific strictness in the investigation of a part of the history of the human mind was Comparative Philology. This science affords a good illustration of the

nature of the Comparative Method. Comparative Philology does not consist in the mere comparison of any two or more languages that may be selected at random. It consists in the accurate and exhaustive comparison of the grammar and vocabulary of all languages which are open to observation, with the view to discover the general laws of the development of language. It is the verification of the hypothesis that the structure and growth of language are regulated by definite and ascertainable laws of nature which has made Comparative Philology a science. The philologists compared the declensions and conjugations, the pronouns, conjunctions, numerals, all the parts of speech of Sanskrit, Zend, Greek, Latin, Celtic, Teutonic, and Slavonic. They collected and analysed the dialects of every quarter of the inhabited globe. They discovered laws of phonetic change. They made a genealogical classification of languages. Just as it was proved that French, Italian, Spanish, and Portuguese could not be derived from Provençal, or from a *Langue Romane* which was the same as Provençal, but, on the contrary, that Provençal and the other Romance languages had a parallel development from Latin, so it was proved that Zend and Greek and Latin and Sanskrit and the old Teutonic languages were none of them derived the one from the other but were all the sister off-shoots of a common stock. Thus was formed the group known as the Indo-European or Aryan family of languages, indicating probable tribal or national connection in the far distant past between the ancestors of the present inhabitants of Hindustán, Afghánistán, Persia, European Russia, Southern Europe, Denmark, Sweden, Norway, Iceland, and the Germanic, Celtic, and Saxon lands. It was seen that all the inflectional modifications of words had once a separate existence as distinct and significant vocables. The relation, for example, was shown between the Greek future *in-aiw* and the old auxiliary *as* to be, and the locative termination *æ*, originally *ai*, of the first declension in Latin was connected with the locative termination in *i* of the third declension. The decay of language through clipped pronunciation was proved to be subject to fixed laws, and to be compensated in some measure by the reinvigoration of literary languages through the primitive speech which dialects preserved. Analysis proceeding further hewed away the growths of inflection and brought to light the ultimate syllabic forms or roots, such as *dā* to give, *iud* to strike, *plu* to flow, and *spās* to see. The laws of the reciprocal transliteration of these roots in Greek and Sanskrit, Gothic, and Old High German respectively, were established by Grimm. The classification of languages passed into a new stage. The principle of structure was substituted for the principle of common derivation, and a morphological classification of languages succeeded a genealogical classification. Languages

were classed as *Radical* or *Isolating* when every root retained its independent form ; as *Terminational* or *Agglutinative* when one root retained and the others compounded with it lost independence ; and as *Inflectional* when independence was preserved by none of the roots forming the compound word.* It was perceived that in the history of language the Radical stage, when every part of a word was independently a perfect root, was prior to the Terminational stage, and that the Inflectional stage, which is characteristic of the Semitic and Aryan families, was the latest of the three. One problem has hitherto baffled all the efforts of the philologists. Language has been resolved into significant roots, combined and modified according to laws which are uniform in operation and beyond the control of human will. The secret of the origin of these roots is still undiscovered.

The great results which have been attained by Comparative Philology may be regarded as historically the consequence of the foundation of the Asiatic Society of Bengal in 1784. "No philologer," wrote Sir William Jones, "could examine the "Sanskrit, Greek, and Latin, without believing them to have "sprung from some common source, which, perhaps, no longer exists. There is a similar reason, though not quite so "forceful, for supposing that both the Gothic and Celtic had the "same origin with the Sanskrit. The old Persian may be added "to the same family."† The discovery of Sanskrit rendered it necessary that the relation of Sanskrit to the other Indo-European languages should be fixed with accuracy.‡ This necessity soon made the existence of a common basis of the Aryan family a recognised and familiar principle. Before the discovery of Sanskrit there was little more than a rough geographical classification of languages. Connection between the tongues of remote parts of the world was indeed presumed ; but the nature and degrees of the connection were left indeterminate.§ The nature and degrees of the connection the study of Sanskrit at once compelled and enabled the philologists to define. Had it not been for the labours of the literary antiquarians, the laws of the structure and growth of language would still have been unknown, because, without an improvement in the classification of languages, those laws could not have been discovered. The needful improvement was made directly Sanskrit was known. The scholarly skill and self-devotion of the first Anglo-Indian students were the informing power which seized upon the scattered indications of the truth and welded the comparatively random results of previous researches

* Professor Max Müller. The Science of Language. Vol. I, Science of Language. Vol. I, p. 298 p. 163.

and 299. † Idem. p. 173.

† Noted by Professor Max Müller. § Idem, p. 174.

into a definite shape which, under the spell of further study, has become a compact and living science.

It has been pointed out that the historian of early times cannot dispense with archæology. Comparative Philology also comes, to his aid. In the face of facts, such as the adoption by the Gauls of an Italian dialect, it is not scientific to assume that community of languages is conclusive evidence of community of race. In the case, however, of the Indo-Germanic nations the theory of their common origin rests upon more than a grammatical analysis of Aryan languages. The theory is strengthened by concurrent testimony from various quarters. The jurist and the student of mythology and of the development of religion support the conclusions of the philologist. It is therefore safe to regard the theory as possessing the amount of certainty which is ordinarily attainable in historical investigations. Accepting this position, historians have begun to interrogate language for the purpose of discovering the degree of civilisation reached by the original Aryan race before its dispersion, and by two or more different branches of the stock whilst still mutually connected with each other after severance from the parent stem. This method rests upon the simple principle that language is the index of ideas and therefore the gauge of progress. Men will find words to express the ideas which are most habitual with them, and the fulness of a vocabulary in any particular direction depends upon the prominence of ideas in the same direction. A pastoral tribe will have many more names for the domestic animals than a settled manufacturing community. A jockey can astonish a person who has no special knowledge of horseflesh with a torrent of vocables each denominating some particular part of a horse. No one at all acquainted with the people of this country can have failed to observe the richness of the dialectic terminologies in designations of the various degrees of kindred both on the father's and on the mother's side—a phenomenon natural to a state of society where the law of property is fused with the law of family relationship. Thus, because of the correspondence between language and occupation and between language and mental calibre, the existence of terms at any particular epoch expressing industrial operations or social institutions is taken as conclusive historical evidence of the existence at that particular epoch of the industries and social forms which the terms are used to denote. Language like a magic mirror retains the images of ancient civilisations centuries after those civilisations have decayed or been displaced. By asserting the terms common to the different nations of the Indo-Germanic stock, Dr. Mommsen* has shown that the primitive

* Mommsen's *History of Rome*. Translated by the Rev. W. P. Dickson, pp. 15-24.

race, before it sent forth the successive armies of colonists destined to found nationalities in the East and West, had attained to a considerable development in pastoral life.

The presence in Sanskrit, Greek and Latin of words philologically identical relating to building, draught and transport, and sewing, testifies to a culture amongst the common ancestors of the nations who spoke those languages decidedly superior to that of savage hunters or perpetually wandering tribes. In those languages the names of the domestic animals, after allowing for the operation of the laws of phonetic change, are in general the same. On the other hand the names of grains vary. A settled agricultural community certainly would have possessed a large number of names for grains. It is therefore concluded that the life of the primitive Aryan race before the severance of any of the offshoots was not rural. If it had been, grains would have acquired their names before and not after the separation. The presence of certain terms indicating certain ideas and therefore certain habits is proof of the existence of those habits. The absence of terms of another class is proof of the absence of the habits to which those terms would correspond. Employing the same method Dr. Mommsen proceeds to show from the evidence of language that the Greco-Italian section of the Indo-Germanic family, before it split into two great divisions and swept out of the main continent of Europe into the peninsulas to found Athens and Rome, had advanced to a further degree of civilisation than the unseparated inhabitants of the original Aryan home. These conclusions rest upon the identification in Sanskrit, Greek and Latin of the words for cow, bird, and horse, for a house, for doors, for an axle, for a yoke, for clothing and the like, and upon the identification in Latin and Greek of vocables indicating a higher grade of culture. This identification has been the work of Comparative Philology. Thus Comparative Philology has created a new kind of historical evidence. The method is obviously applicable to the history of all nations which may reasonably be believed to have a common origin. It will not yield dates. It will not yield picturesque narratives of battles, or romantic stories of the dynastic struggles of kings. But it will approximately fix broad epochs and will reveal what at those epochs was the state of society in those nations to whose history it is applied. Here, then, is another source from which materials may be drawn for the re-construction of the Indian past. Abundant testimony is imbedded in existing languages. We have only to work the mine. If, for example, in Northern India we were to take Panjāb, Hindi, and Bengālī, and were to compare the vocabularies, distinguishing the words which were common to the three languages from those which were peculiar to any one or two, we should be able to sketch in general

outline and with a high probability of truth the social condition of the common ancestors of the races now inhabiting the Panjáb, Hindustán Proper, Bihár and Bengal, before any one of those races had acquired for itself a distinct national character. The order in succession of the several immigrations could be ascertained by determining what words each language or dialect had in common with the whole Indo-European family, because we might presume that the section of the Aryan race which was detached from the primitive stock when the civilisation of the primitive stock was least advanced was the section which was the first to colonise this country. The first tide of immigrants would have carried with it fewer of the words common to all Indo-European races than the tides which spread into India at subsequent periods. The presumption, however, as to the order of the immigrations could not be accepted as an historical certainty unless it were confirmed by archaeological research and the political geography of ancient and modern times. It is clear that the same plan might be followed in investigating the history of the southward migrations which have peopled the Indian peninsula.

An inquiry by the aid of Comparative Philology into the history of Indian nationalities is, of course, quite distinct from the purely philological examination of the varieties of Indian speech. In such an inquiry the strata of language would be laid open because they contained fossil history, not in order that they might declare the laws of their own composition. The purpose in view would be not the improvement of the science of language, but the discovery of historical truth. The direct application of the comparative method to the observation of Indian phenomena is the application of the comparative method to the study of Indian languages. That is an application of the method which is in no danger of neglect. The advancement of Comparative Philology by a scrutiny at once wide and close of the languages of British India, more especially of the Non-Aryan languages, is an end to which many of the present generation of Indian students are doubtless devoting their labours. Dr. Hunter has led the way by the publication of his Comparative Dictionary. How much remains to be done is known best by those whose experience has taught them most thoroughly that India is a very Babel of tongues. To mention an instance familiar to officers on the North-West Frontier, the examination of Beluchi would, it may be conjectured, throw much light on the connection between the dead and living languages of Persia, and upon the relation of Persian to Panjābi. Yet it is believed that there is not at the present moment in print a Beluch text book, a Beluch dictionary, or a Beluch grammar.

In his first lecture upon the science of Language, Professor Max Müller laments that his subject has not more to offer to the

utilitarian spirit of the age.* Were he to begin his lectures again he would have no need to offer an apology for any deficiencies in his favourite study on the side of practical usefulness. The discoveries to which Comparative Philology has led and is leading will assuredly rank with any that have ever freed the human soul from the burden of delusions, or have ushered in newer and sounder principles bearing on social progress and the social order. The Science of Language is the parent of Comparative Mythology. Less directly it has given rise to juridical investigations of the type of Sir Henry Maine's "Ancient Law," and to social investigations of the type of those which have been undertaken by Mr. McLennan, Mr. Tylor, and Sir John Lubbock. Comparative Mythology will have an important practical effect, if it is an important practical matter to understand the growth of religious ideas. Comparative Jurisprudence and, if the phrase may be allowed, Comparative Sociology, are pregnant with instruction to the statesman and the legislator because they hold out the best promise anywhere visible of an approximately sound theory of human progress, and thus of an approximately accurate test to try the suitability of executive measures, of legislative enactments, and of forms of Government, to national idiosyncrasies. Each of this family of subjects extends the methods of physical science severally to the examination of mythology, of law, and of the social institutions of mankind. That is the ground of the resemblance of these subjects to Comparative Philology. In consequence of this identity of method the whole group may be said to owe its origin to the transformation of philology into the science of language. It has been shown that the spell which produced that transformation was the study of Sanskrit by the Anglo-Indian literary antiquarian. It is thus that the torch of knowledge is passed from hand to hand. The original fire does not pale; and as each fresh hand grasps the torch there bursts forth a new flame as bright and as lasting as the first.

The word mythology, which literally means the telling of legends or tales, is popularly used to denote the belief of a nation or of a set of nations as to the existence and conduct of beings whose nature is celestial and immortal. It is in this sense that we mean the mythology of the Greeks, that we call that system, rounded here which set up Zeus as the king of heaven, which hulked from beside him, and which made Athene its ally, is not easily separable from religion. In this popular signification, indeed, that a mythology is parable from religion. It may be said, without faith in the efficacy of prayer, a theogony without ethics, and a But the term is often used so as to or, or sacrifice, or asceticism

* Science of Language, Vol. 1, p. 11.

imply the ideas which that definition would exclude. A collection of stories about the actions of beings who can only be called supernatural because the limitations to which they are subject differ from those which control mankind, beings upon whose caprice or passion there is no restraint, or who are at best the slaves of an inexorable necessity, has no more claim to the title of a religion than Andersen's Fairy Tales or the Arabian Nights Entertainments have to the title of works on theology. But when prayers are offered up to the God who can grant rain to the thirsting soil, or when propitiatory sacrifices are made to an earth goddess, or when a devotee believes that fasting will exalt him above Vishnu, still more when the moral ideas of right and justice begin to be predicated of the gods, mythology merges in religion and becomes indistinguishable from it. It is this connection between mythologies and religions which leads to the study of mythologies its absorbing interest.

Of late years a technical meaning has attached itself to the term mythology. It is employed to indicate not a system of belief, but a particular form of mental error. Mythology often means the process whereby a phrase which was originally a metaphor is in course of time mistaken for the expression of a matter of fact; or more generally, it means any exhibition of the tendency to give a new and a wrong explanation of the meaning of a word of which the original signification has been forgotten, including the invention of stories to account for proper names. The metaphors which speak of the earth as the mother of all living things, and of the heaven as embracing the earth, are perfectly plain to us, and we are in no danger of being misled by them. But it was these metaphors which brought Ouranos and Gaia into being, and which made Zeus the lover of Demeter. Mythology, the process or mental tendency, is by no means confined to the production of theogonies. The mistakes which changed "*The Boulogne Gate*" into "*The Bull and Gate*," and "*The Bellerophon*" into "*The Billy Ruffian*," are mythology.* So is the legend of St. Christopher carrying Christ across the Red Sea, a tale plainly rising out of the Virology of the name of the Saint.† The personification of between Nature, Freedom is mythology as much as the confusion appropriate to a bear and *rikhsa* a star which gave the in-Northern Wain,‡ of the Great Bear to the constellation of the meaning of Boulogne was in these cases something was forgotten. The meant 'bear' as well as 'star.' It was forgotten that *rikhsa* nothing whatever but the proper was forgotten that Christopher was of an individual who suffer.

* Max Müller, Science of Language. Second Series, p. 530.

† *Ibid.*, pp. 552-553.

‡ *Ibid.*, pp. 361-366.

ed martyrdom, and that Virtue, Nature and Freedom were nothing but abstract terms and not proper names at all. In each case mythology stepped in and supplied a substitute for that which memory had failed to retain.

It sounds like tautology to say that mythologies owe their existence to mythology. The origin, however, of theogonies and myths was not discovered till the Science of Language lifted the veil of mystery which shrouded them. Philology pointed to the mental infirmity, the "disease of language" which confused metaphor with fact. Philology also laid down the principle that the derivation of words was to be sought not merely in those languages in which they occur, but in the roots and in the forms the words assume in kindred languages and in the common sources of families of languages. It was the application of this principle to the names of mythological personages, that provided the clue to the interpretation of the myths and folk-lore of the Aryan nations. Here again the progress of knowledge was owing to the labours of the literary antiquarians.* The discovery of Sanskrit gave an impetus of exactly the same kind to the study of mythologies as that which it had given to the study of languages. It was seen that the mythologies of nations with a common descent must be explained together. The explanation became possible because many terms which in Greek and Latin and other languages had hardened into the mere names of imaginary beings, retained in Sanskrit their original shape of metaphor. Professor Max Müller has put this with admirable clearness. "You will see,"† he observes, "that a great point is gained in Comparative Mythology if we succeed in discovering the original meaning of the names of the gods. If we knew, for instance, what *Athene* or *Here* or *Apollo* meant in Greek, we should have something firm to stand on or to start from, and be able to follow more securely the later development of those names. We know, for instance, that *Selene* in Greek means moon, and knowing this, we at once understand the myth that she is the sister of *Helios*, for *helios* means sun;—and if another poet calls her *Euryphaëssa*, we are not much perplexed, for *euryphaëssa* meaning wide-shining, can only be another name for the dawn. If she is represented with two horns, we add to remember the two horns of the moon; and if she be that have become the mother of *Erse* by *Zeus* we agree of *Zeus* and *erse* means dew, and that to call *Erse* the matter-of-fact language *Selene* was no more than if we, in our moonlight night. Now one guage, say that there is dew after that many of the names of the gods great advantage in the Veda: that many of the names of the gods are still intelligible, are in fact, not only as proper names,

* Max Müller, Science of Language, † *Ibid.*, p. p. 410, 411.
Second Series, p. 404, 405.

"but likewise as appellative nouns. *Agni*, one of their principal "gods, means clearly fire; it is used in that sense; it is the same "word as the Latin *ignis*. Hence, we have a right to explain his "other names, and all that is told of him, as originally meant for "fire. *Váyu*, or *Váta* means clearly *wind*; *Marut* means *storm*; "*Parjanya* rain; *Savitar* the sun; *Ushas*, as well as its synouyms, "*Urvást*, *Ahaná*, *Saranyá*, means dawn; *Prithiví* earth; "*Dyávdprithiví*, *heaven and earth*." In Greek the name of the Charities or Graces does not betray their origin. But when we trace the word *Charis* to its Sanskrit equivalent, we find that the *Harits* * were the horses which drew the chariot of Indra, and recognise in the bright companions of Himeros and the Muses one of the innumerable myths of the dawn. The Greek *Zeus* † and the Latin *Jupiter* are no more than names for the king of the gods. *Zeus* and the first syllable of *Jupiter* are identical with the Sanskrit *Dyaus*, derived from the root which yields *dyut* to learn, and *dyu* sky or day. *Zeus* and *Jupiter* are the beaming gods, personifications of the sunlit heaven. We know the Trojan Paris as the seducer of Helen. Mr. Cox ‡ identifies him with the Vedic *Pani* "who hides the bright cattle of Indra in his disinal caves,"—a personage in one of the myths of the alternations of day and night. Many of the Greek myths are perfectly transparent. We cannot mistake the meaning of the birth of *Aphrodite*, the foam-goddess, from the ocean stained with the blood of the mutilated *Ouranos*—the morning sun rises from the sea which is reddened by the glow that heralds the dawn.§ Obscure myths not only of Greece and Rome, but of the Aryan nations generally, are explained by the method indicated. Other myths, besides those which are properly theogonies, are analysed by the same process. Folk-lore which has never acquired a religious significance, is traced to the sources whence sprang the tales of the Erinyes, of *Hermes*, and of *Herakles*. The conclusion is by no means that the *Iliad* and the *Odyssey*, the story of the *Volsungs*, and the *Nibelung Song*, the *Rámáyana* of Hindustán, and the Persian *Sháhnámeh* are borrowed the one from the other.|| But Comparative Mythology asserts that mythical phrases descriptive of the phenomena of nature, phrases in which sensuous imagery and the ceptions of anthropomorphism were used to describe religious con- Aryan race, physical facts, were the common property of the parent has in its own wíthat each of the many dispersed descendants understood, modified, and developed the

* Cox, *Mythology of the Aryan Nations*, vol i., p. 48.

† Max Müller. *Science of Language*. Second Series.

N^{at}. Cox, *Mythology of the Aryan* § *Ibid*, vol. i., p. 64; vol ii., p. 327. *Ibid*, vol. ii., p. 1.

Ibid, vol. ii., p. 324, 325.

transparent primitive myths. Thus it has been discovered that one principal centre from which the Aryan mythologies have radiated is the cluster of metaphors which poetical imagination chose to express the course of the sun in heaven, the succession of the seasons, and the battles of wind and storm; although the forms ultimately assumed by the original myths may differ as much as the tale of the death of Achilles from the tale of the death of Baldar, or as the quest of the Golden Fleece from the legend of the Holy Grail. We may leave the great subject of Comparative Mythology with the remark that it has two points of contact with the observation of Indian phenomena. In the first place, the study of Sanskrit gave to the subject its present form. In the second place, the religious literature of India, including the comparatively recent modifications of the early Vedic faith, is perhaps the most rich and promising soil in which comparative mythologists could labour.

The passage from the unscientific to the scientific treatment of any subject is beset by peculiar intellectual dangers. Pitfalls of ambiguity waylay us at every step. Words alternately retain and discard their vague and popular and their restricted and technical significations. Until we have so far advanced as to have reached a fixed scientific terminology, we can only make sure of progress by frequent pauses to examine the ground on which we stand. It may be a question whether the discoveries of Comparative Jurisprudence are as yet sufficiently full and sufficiently certain to entitle it to the name of a science. At all events it involves the application of the methods of science to the phenomena of law. The theory of legal history, of the origin and development of legal ideas, has just emerged from the profound darkness which had been engendered by unscientific habits of thought. It is no wonder, therefore, that the mists of ambiguity still cling to both words in the phrase Comparative Jurisprudence. Perhaps enough has been said upon the sense in which the term Comparative is used in this article. It implies an exhaustive comparison, so far as that is possible; first, for the purpose of classification, and secondly, for the purpose of discovering the laws of growth and structure. The word Comparative is thus used in a signification more restricted than that in which it is popularly employed. On the other hand, by Jurisprudence, something more is meant than is included in the technical term of one school of jurists. Jurisprudence, in the well-known phrase of Austin, is the Philosophy of Positive Law. Comparative Jurisprudence deals with much that Austin and his followers would call positive morality. In every society some provision must be made for the distribution of property, for the repression of crime, and for the definition of the private and public conditions of individuals. It by no means follows that the provision

takes the form of precisely determined rules and principles. The more primitive the society, the higher is the probability that the customary observances, to which it is rather an undue contraction of language to refuse the name of laws, will be vague and shifting. Principles which have never been reduced to writing, which have never been codified, which have never been formally announced by authority, which are guarded by no definite sanction, which may be the mere opinions or sentiments of the majority of bodies of men, are the laws of early civilisation. Such principles are the subject matter of Comparative Jurisprudence equally with the sharply defined rules established and enforced by political superiors in the maturity of social life. Comparative Jurisprudence aims at the formation by wide and careful induction of an approximately sound theory of the progress of jural ideas, and of the legal institutions which are the outcome of jural ideas, from primitive to modern times.

Comparative Jurisprudence, thus understood, forms a part of a wider study which it is proposed to call Comparative Sociology. Sociology has been termed by John Stuart Mill a convenient barbarism.* The thing itself is as new as the application of scientific methods to the history of society and of the human mind. A new term is therefore necessary. Sociology is encumbered with precisely the same ambiguity as jurisprudence. Sociology may mean the theory of society as it ought to be, just as jurisprudence sometimes means the theory of laws which ought to be imposed; or it may mean the theory of the progress of society as it has been, and the explanation of social forms which actually exist. It is in the latter sense that the word is used here. Sociological inquiry obviously includes inquiry into laws, and into the customs which in early societies are the substitute for laws strictly so called. It also includes much more. Language, mythology, religion, art, morals, politics, habits of life, all fall within its scope. The distinguishing mark of Comparative Sociology is that its investigations are made by the method which has been illustrated from Comparative Mythology and the science of language.

The end, then, of Comparative Sociology is the theory of social progress. Unquestionably, the comparative method must be the basis of the future philosophy of the origin and development of society. At the first touch of the historical method, the figments of *The Social Contract* and *The Law of Nature* melted into congenial air. The comparative method is not identical with the historical method,† but soon after the application of the com-

* Mill, *System of Logic*, vol. ii., p. 481.

† See Maine, *Village Communities in the East and West*, p. 6.

parative method to any given subject, the comparative method and the historical method seem to coincide. The reason of this is that in the departments of knowledge which have hitherto been treated by the comparative method, the law of development prevails. The historical method traces the successive stages in the growth of particular nations, or arts, or ideas. Wherever the Comparative method has been applied, successive stages of growth have been revealed by it. Nowhere does this effect of the comparative method appear more strikingly than in the light which the morphological classification of languages throw upon the history of language in general. The historical method destroyed the old theories of the origin of society and law by bringing them to the test of the ascertained facts of the past. The comparative method must re-construct, with materials drawn alike from the past and the present, a new edifice in place of the cloudy structure which the historical method has swept away. The limits of the two methods are not the same. The characteristic of history is that its aim is narrowed to a single set of objects. History is concerned with a given set of facts of a given description which occurred within a given time. These facts it must state according to the best evidence that can be obtained, and these facts it must explain according to the most approved principles of psychology and social philosophy. The characteristic of social philosophy, using the term in the sense of the theory of social progress, is that it is co-extensive with the whole field of social facts and with the whole duration of human society. Social philosophy does not ask what were the events in the life of a particular nation, or what was the rise, progress, and decay of a particular institution or art or belief. It asks what are the successive periods in the development of the human race as a whole. History provides social philosophy with a part of the evidence upon which its generalisations may be founded. Social philosophy provides history with a part of the explanation of the facts which history details. The comparative method has become the method of social philosophy, as the historical method is the method of history. It is true that we cannot expect the comparative method to yield such clear and certain results in the fields of jural and social inquiry as it has produced in the study of languages and of myths. Not only are the phenomena of human society much more complex than the phenomena of language, but, as Sir Henry Maine has observed,* they are also much more at the mercy of individual volition. In the present state of our knowledge we cannot venture to hope for more than an approximation to truth in the explanation of

* *Village Communities in the East and West*, p. 8.

ancient and modern aspects of humanity. Just as a complete history of mankind, if its every chapter were to be rendered perfectly intelligible, would pre-suppose a complete social philosophy, so a complete social philosophy, could such be framed, would pre-suppose a complete account of the past and present of the world.

In the present age when the intellectual atmosphere is charged with physical science, and when flashes of new light, awakened by the methods of physical science, are bursting upon us from every quarter, the extension of those methods to the examination of human institutions and of the history of ideas was only a question of time. It cannot be said that this extension of method would not have taken place if Sanskrit had not been discovered. But there can be no doubt that the discovery of Sanskrit greatly accelerated the movement of the currents of speculation on society towards the direction in which they now flow. The discovery of Sanskrit, by leading to the discovery of the common origin of the Aryan nations, shifted all the land-marks of ancient history, and compelled historians to map out the past anew. This necessity arose just as the conditions of the mental climate of Europe had magnified the importance of accurate investigations into fact. The consequence was a great improvement in the modes of historical research. The past was called up from the dead to testify to the falsity of theories which had not quite perished. The actual facts of early society were compared with the systems of Locke and Rousseau; and the testimony which the historical method adduced cut away the last vestige of faith in the old ideas. The need, however, was felt for something to fill the gap which had been opened in social theory. As in the old German legend, the spear which had made the wound was the instrument which could heal it. The comparative method by its application to so much of the history of the human mind as is included in the history of language, had rendered inevitable the re-construction of ancient history and the destruction of all theories of society which did not ultimately rest on facts. It was seen that the comparative method would yield theories which rested upon that foundation. The light which suddenly emanated from philology when philology became a science, dispelled the past darkness and displayed the path of the future. That philology became a science is due, as it has been said, to the discovery of Sanskrit. Had not the first Anglo-Indian students devoted their leisure to Sanskrit literature, the rise of comparative philology, of comparative jurisprudence, and of comparative sociology, might have been delayed for many years.

It would be impossible in this sketch to give any adequate account of the large generalisations which comparative jurispru-

dence and the observation of early and savage communities have submitted to the modern reader. Still less can any attempt be made to estimate the value of propositions which have been tentatively advanced as laws of legal and social growth. The most that can be done is to mention very briefly some of the more celebrated assertions of which the original ground must again and again be examined by the future students of society, until those assertions have either been modified by the progress of induction or placed altogether beyond dispute.

The greater part of Sir Henry Maine's work on *Ancient Law* deals with periods in legal history subsequent to the formation of the family. He does not inquire how the relationships of father and son, of husband and wife, of master and slave, came to be recognised. The lines which he quotes from the *Odyssey* as illustrative of the earliest state of mankind pre-suppose marriage, as we understand it, because they speak of wives and children as specially connected with one man.* The department of study which has been called comparative sociology, penetrates farther back into the history of the race. Sir John Lubbock has collected a large amount of evidence as to the practices of savage nations, and he expresses his conclusions by saying that the natural progress of ideas of relationships is ; " first, that a child " is related to his tribe generally ; secondly, to his mother and " not to his father ; thirdly, to his father and not to his mother ; " lastly, and lastly only, that he is related to both."† Sir Henry Maine takes the social group of which the type is the Roman family united under the power of the father as the starting point of his observations. He expressly says that to the question— what are the motives which originally prompted men to hold together in the family union ? Jurisprudence, unassisted by other sciences, is not competent to give a reply.‡ The reply recently suggested is that marriage owes its origin to the disposition to permit to individuals the exclusive enjoyment of what they had won in war. Differing from Mr. McLennan, Sir John Lubbock believes that exogamy or the custom of always marrying out of the tribe arose from marriage by capture, and " that capture and capture alone " could give a man the right to monopolise a woman to the exclusion of his fellow clansmen ; and that hence, even after all necessity for actual capture had long ceased, the symbol remained ; " capture having by long habit come to be received as a necessary preliminary to marriage.§ " However repulsive the view

* τοῖσιν δ' οὐτ' ἀγοραὶ βουλ-
ηφόροι οὔτε Θέμιστες,
Οεμιστεύει δὲ ἕκαστος.
παίδων ἢ δ' ἀλόχων οὐδ' ἀλλήλων
ἀλίγουσιν.

Maine's *Ancient Law*, p. 124.
† The *Origin of Civilisation* p. 130.
‡ Maine's *Ancient Law*, p. 270.
§ Lubbock, *Origin of Civilisation*,
pp. 83-84.

may appear to us that in the earliest forms of social union marriage was unknown, and that the tie was first made by violence and against the will of the woman, it is obviously most important to know whether that view is correct. This is one of the innumerable questions in which great service may be done to the advancement of knowledge by applying to the results of European thought the test of Indian experience. What is needed is evidence collected by persons able to estimate its value and to understand the kind of evidence required,—evidence such as the Aryan and Non-Aryan races of British India will supply in abundance. One class of facts would prove exceptionally useful. It has been remarked that the comparative method has always led to the recognition of laws of development. The comparative method has pointed to the presence, in communities which are in some degree advanced, of those phenomena which have been aptly termed "Survivals." Institutions outlast their purposes. But institutions were not founded without reasons which seemed sufficient to those whose conscious or unconscious action established them. As society grows and its character changes, the grounds of many of its rules and customs shift and finally sink by the force of the changes themselves. The old principles and practices are either totally abandoned, or endure still bearing traces of their origin plainly perceptible through modified forms, or are maintained for reasons which are perfectly new, and which are the results of new social needs. We do not now consider that mutilation of the head and face adds to personal attractiveness, or that masculine charms are enhanced by tattooing the body. Yet, European ladies pierce their ears, and the Tichborne case shows that the practice of tattooing is not wholly obsolete even amongst English gentlemen. The mock resistance of the bride which is common to so many nations, and the widely spread custom forbidding the relatives of the bride to speak to the relatives of the bridegroom, and the relatives of the bridegroom to speak to the relatives of the bride, are traces of a time when marriage by capture was a stern reality.* In their funeral ceremonies the Chinese burn paper images in honour of the dead. The Romans used to throw dolls into the Tiber as a substitute for human sacrifices. Each of those observances is a survival, indicating the former prevalence of cruelties like those of Dahomey, and of immolations analogous to Suttee. The value of survivals is that they are the best proof obtainable that the society in which they occur has passed through the phases with which the institutions represented by the survivals were associated before the atrophy produced by progress had set in. Like the rudimentary organs in animal

* *Origin of Civilisation*, pp. 2, 9, 97.

nature, survivals point back to a time when that which has withered by disuse was animated with energy and purpose ; although the purpose may have implied lower habits of life. No more useful contribution could be made to the literature of comparative sociology than an account of Indian survivals.

The earlier chapters of "Ancient Law" enunciate a theory of the development of law from an epoch later than that which is characterised by the "insulated groups held together by obedience to the parent."* "*Themistes*" are judicial decisions, isolated judgments dictated to the judges in each separate case by divine inspiration.† As "*Themistes*" are pronounced by a sovereign, families, it is said, must not only have been formed before the period of "*Themistes*" but also have been united in some crude political organisation.‡ In the "*Themistes*" Sir Henry Maine sees the germ of the law of advanced communities.§ The progress is through the gradual accretion of a body of customary law,|| to the publication of that law in primitive codes¶ of which the best known example is the Twelve Tables of Rome. Then follow the means by which, in progressive societies, the old law is brought into harmony with new social requirements as they continually arise. These are legal fictions, equity, and legislation.** Legal fictions are assumptions which conceal or affect to conceal "the fact that a rule of law has undergone alteration, its letter remaining unchanged, its operation being modified." The examples given are English Case Law, and the Roman *Responsa Prudentum*. Equity and Legislation are distinguished from legal fictions by the circumstance that the interference with the law is open and avowed, being the result of the conscious application to states of fact of moral principles which are regarded as superior to those underlying the old law, or of direct legislative enactment. A clear and succinct theory of this kind gives to the inquirer a tangible object to examine. It opens to the Anglo-Indian two distinct paths of investigation. There is much evidence of the existence amongst the Non-Aryan races of India of forms of Communal marriage, and therefore of a state of society antecedent to the formation of families. One problem is, what are the aspects which the customary observances supplying the place of laws assume in societies of this exceedingly primitive description? The other problem is, do the histories of Hindu and Muhammadan law support a generalisation which has been framed, not, indeed, entirely but principally, from the facts of the past of Europe? These questions are mentioned not

* Maine, Ancient Law, p. 125.

† *Ibid.*, p. 4, et seq.

‡ *Ibid.*, p. 125.

§ *Ibid.*, p. 26.

|| *Ibid.*, p. 12.

¶ *Ibid.*, p. 14.

** *Ibid.*, p. 25, et seq.

as exhausting the suggestions which the theory offers, but as examples of a class of problems with which Indian observation should deal.

Amongst the many profound remarks of Sir Henry Maine none seems more likely to resist the attacks of criticism and none has obtained a speedier popular acceptance than the formula that progress has been a movement from status to contract. Status means the personal conditions which are derived from the family union. The man who inherits from his forefathers the whole of his legal clothing of rights and duties, who finds a niche in the legal relations of life ready for him which he is only to occupy, is under Status. In so far as rights and duties are acquired and imposed not by birth but by the voluntary effort and consent of individuals, Status has given way to Contract. Status fixed the legal position of the Female under Tutelage, and of the Son and the slave under the power of the father of the family. Contract fixes the legal position of the woman who disposes of her own hand in marriage, of the child of full age who can sue and be sued by his father, and of the workman who possesses a recognised right to strike. The great interest to Indian administrators of this law of final development is that if the law of persons and the law of liberty are not really distinguishable in archaic societies a new stimulus is given to reflection upon Indian proprietary right. Before British rule, was that which the introduction of modern juristical conceptions has stamped with the name of property in land a mere personal right to a certain quantity of produce, a mere personal right to support based in family relationship or tribal subordination? Or did rights of cultivation sometimes wear that shape, and sometimes appear in forms analogous to those rights over the soil in Teutonic Europe which the contact of Roman Law metamorphosed into feudalism? In what Indian societies, and at what point in their development, did the conception of a distinct proprietary right to a definite portion of the earth's surface, whether vested in village communities, in families, or in individuals, take the place of a personal right to maintenance as against the father of the family or the head of the tribe? The analogies between the village communities of the East and West have been dwelt upon by Sir Henry Maine in his last work. But it is obvious that village communities do not exist "by nature." Even in India the village community is not the ultimate social fact. Many stages of growth must have occurred before the formation of so complex a group as the ordinary Indian village. Although legal inquiry may perhaps be satisfied to begin with the village community, social inquiry demands to know how the village community arose. Evidence calculated to throw light upon this point should be collected by all those who have the

opportunity, more especially by officers whose duty calls them to the borders of the empire or to hills peopled by wild and barbarous tribes.

It is not often that a course which is eminently desirable in the interests of science is seen at first sight to coincide with a course which promises extrication from immediate practical difficulties. Allusion has been made to the Panjáb Laws Act, and to the Oudh Laws Bill now before the Legislative Council. It is not easy to understand how the provisions with regard to customary law will be effectively administered unless means are taken to provide the Courts with written records of custom. No one who has had any experience at all of the vagueness of Indian judicial evidence can doubt for a moment that if the rule of custom has to be proved in every suit which falls under the sections relating to custom, the tendency of the Hindu and Muhammadan law to supplant local custom, the very tendency, in fact, which the sections are designed to counteract, will scarcely receive a check. In England there is a body of Case Law which defines custom and the legal proof of custom with sufficient accuracy. In India custom has received no such definition. And if we require the same proof of custom in the courts of the Panjáb and Oudh as would be required by the Courts at Westminster, so much of each Act as relates to custom will practically remain a dead letter. We shall have proclaimed to the Sikhs and the Patháns and the Beluchís that we are about to grant them their own customary laws, and we shall go on administering the elaborate system of the Hindu and Muhammadan jurists.

Much stress has very properly been laid upon the importance of rescuing district and settlement records from destruction, and of interpreting their technicalities in such a way as to render the facts they contain available for the information of the general public. There are few tasks more useful than the examination of these documents, and the compendious statement of their results. But these documents are, in the legal phrase, no more than secondary evidence of the social state of India, and, like all historical evidence, they cannot be expanded at pleasure. If we really want to know what the customs and ideas of the people are, the best and the simplest plan is to go and ask the people themselves. In recent Panjáb settlements it has been the practice to compile statements of tribal and local custom called in the vernacular *Riváj A'm*. These statements of tribal and local custom originated in the Village Administration Paper,—an account of the tenures, mutual rights and duties, and customary observances of the village proprietors and the village servants, which was drawn up for each village separately at the first settlement of land. Subsequently it was seen that customs were in some cases coextensive

with the tribe, and in other cases coextensive with localities of considerable size, and that thus large bodies of custom prevailing in wide circles might be recorded at a single stroke. Accordingly local and tribal records have been made in some districts, where the village administration paper contains no more than the matters which relate exclusively to the constitution of the village as such, and the exceptions, if any, to the general custom of the locality or tribe. The main object of these compilations has been the collection in writing of rural usages affecting land. It is obvious that the customs which have acquired the force of law under the Panjāb Laws Act might be compiled in a precisely similar way. A series of questions might be composed calculated to elicit exhaustive answers on all the subjects mentioned in the section of the Act which has recognised the customs of the country as law. These questions might be put to the headmen of tribes and villages in public assembly throughout the whole province, taking every district in succession. The answers might be received by a responsible officer, and to the record thus framed the force of a settlement record might be communicated; that is to say, the Courts would presume the statement of custom contained in the record to be true, and the burden of proof would be on those who impugned it. There would then be no danger of the introduction of a rule of Hindu or Muhammadan law. It is probable that the recorded statement of custom would scarcely ever be contested. Whatever may be thought of the necessity of the scheme proposed from the point of view of the exigencies of administration, there can be no question but that a full record of Panjāb custom would be of inestimable value to the student of primitive juridical ideas.

Of course the Indian phenomena to which this article refers are not the physical phenomena of the Indian continent, but the phenomena of Indian society. Justice will no doubt be done to botany, geology, and kindred sciences in the Imperial Gazetteer which is now under preparation. The Imperial Gazetteer will also deal with statistics. To those who feel any sympathy with the native sarcasm which gives to Anglo-Indian rule the name of the Reign of Statistics—*Nabsha ká ráj*—the observation made by Dr. Hunter* that statistics form an indispensable complement of civilisation may seem a disputable proposition, if the kind of civilisation meant be that which we can introduce into India. To collect Indian statistics is no doubt one method of observing Indian phenomena. But the sort of observation which is of most use to the student of human development is concerned rather with the nature than with the number of the facts observed. It is

* Annals of Rural Bengal, p. 269.

far more important, for example a clue to the interpretation of the social standing of Hindus, that we should know the conditions of marriage amongst them and the ideas which are associated with the tie, than that we should have more or less accurate information as to the number of marriages which take place in a given district within a given time. The importance of statistics in their most direct and obvious bearing upon practical administration is in no danger of being underrated. The proportion of male to female births in particular places is of the utmost consequence in connection with the suppression of infanticide. "There is no other method of testing new measures designed to check particular offences than to collect and compare the number of offences and convictions subsequent to the amendment of the case with the number under the law before the amendment was made. The increasing pressure of population on the soil, and the degree in which irrigation works or the introduction of new industries may be brought to relieve that pressure, can only be estimated by numerical statements. These considerations are so obvious that it is needless to dwell upon them. It is sufficient to remark that, to the jurist and to the student of social progress, proofs of the prevalence of crimes of a certain class or of the excess of one sort of occupation over another, are chiefly valuable in so far as they throw light upon the whole social condition of the people. The statesman wishes to know what is the effect of his policy and he turns to statistics for his evidence; not because statistics are unimpeachable, but because they are the best evidence he can obtain. The student of social progress inquires what crimes and what occupations are most prevalent, not before or after a particular enactment, but amongst people of a given social type. Statistics supply him with a partial answer. But unless he is able to connect the facts which are supplied by statistics with the known ideas and other known habits of the people, statistics are for him comparatively unfruitful. It is not sufficient for him to know that amongst the agricultural communities of India the most usual form of proprietary right is joint-ownership, and that cattle-theft and house-breaking are the most frequent offences against property. He must be able to explain why land should be held in common, and how it happens that Indian thieves are specially prone to drive off their neighbour's cattle, and to dig through their neighbour's walls. There is, however, one function of statistics which the Indian press can never stamp with too much emphasis. The reign of statistics might also be called the reign of political economy. But statistics are to political economy what constitutions are to hereditary kings. Political economy is apt to become a most mischievous tyrant, unless the limits of its power are known and acted on. It cannot be repeated too often that the de-

ductions of political economy, so far as they rest on moral and psychological principles, not on physical facts, are based upon hypotheses which are not strictly true even of the mercantile countries of Europe, and which are very far indeed from the truth in a land so much under the sway of custom as the British empire in the East. It is not true, it is very far from the truth, that the landlords and tenants of India are guided in the pursuit of wealth solely by an enlightened view of their self-interest. It is not true, it is very far from the truth, that Indian artisans whose hereditary employments fail them will turn their hands to trades yielding an equal or superior return. The doctrine of "*Laissez faire*" may be an admirable doctrine in countries where industry and enterprise are strong, capital abundant, and intelligence widely diffused. But we cannot afford to act upon the doctrine of "*Laissez faire*" in India. We must continually be on our guard to test the theorems of political economy by an appeal to actual facts. Statistics provide the instrument by which to measure the amount of truth which those theorems contain when applied to Indian society.

The evils which have resulted from the juxtaposition of a highly civilised people with the primitive races of this country afford a fertile theme to those who are more prompt to be indignant at wrong than able to view with justice the inevitable difficulties of Indian Government. The British rule, it is admitted, has extirpated thug, abolished suttee, diminished infanticide, repressed brigandage, and put an end to the wars of Indian potentates. But, it is urged, the life of the people is neither happier nor better than it was in the old days. For the exactions of native rulers we have substituted a systematic taxation, of which the incidence is more severely felt, partly because the economical principles of taxation are far less intelligible to the native mind than the arbitrary fiat of a despot, and partly because rebellion, the last resource of desperate men, is known by sad experience to be hopeless. If we have extinguished the crimes of a turbulent society, we are also extinguishing its virtues, and are arming the cunning and the unscrupulous with the might that belonged to the brave and the strong. We have gloried in "breaking down the barriers of caste and creed;" and in declaring, according to the most approved principles of jurisprudence, that in the eye of the law all men are equal, and, according to the most approved principles of political economy, that all men must equally be left to take care of themselves. But we have failed to perceive or have forgotten that native morality has neither been largely affected by commerce nor subjected to the influences of Roman law and Christian doctrine. Native morality, if we except that of the more respectable merchants who have learnt in trade the pecuniary value of good-

faith, is at its best coextensive with the family or the tribe, not with mankind at large. In primitive societies robbery is not distinguished from legitimate warfare; and we are indeed deluded if we suppose that because dacoity is punishable under the Indian Penal Code a stranger has ceased to be regarded as an enemy whom any one may righteously plunder by cheating if he dare not plunder him in arms. Our eager encouragement of the growth of individual right and our contempt for caste distinctions are surely undermining the only kind of morality that the people possess, and for the foundations we remove we have absolutely nothing to substitute that could be accepted by the natives. The people may have been rescued from the tender mercies of hereditary tyrants, but they have been delivered over to the tender mercies of perjured usurers and corrupt subordinate officials. The Village Communities are breaking up. In these peaceful times, loyalty to the caste, to the clan, to the family, has become superfluous. Any peasant can bring a suit against his brother or prefer a false charge against the head of his tribe. The people are rapidly learning the lesson which law teaches, to treat all men alike; and this means that men are beginning to cheat their fathers and sons and brethren of the clan, with as little compunction as would have been felt in old times for the pillage of a passing caravan or the sack of a distant homestead. We may have rebuilt a shattered empire. But the superstructure is crushing the society on which it rests.

However extravagant many of these charges may appear, it is impossible not to own that in some of them there is a certain substratum of truth. Easy as it would be to take up a brief for defence or extenuation on each count of the indictment, that task would be beyond the present purpose. Whether our rule has hitherto been beneficial to the people, or has merely introduced a new order of evils in place of the old order of evils which it has swept away, history alone can decide. For the future there is good hope. Our knowledge of the Indian races is becoming fuller, clearer, and more systematic. Above all, the increase of attention to the philosophy of past progress is teaching us to realise distinctly the depth of the gulf which severs primitive from modern ideas. The danger of supposing our own institutions and our own hypothetical deductions to be of universal application, and of misinterpreting the institutions of the country, is diminishing day by day. Considering the large advance in science which is due to Indian studies, the most despondent and the most indignant champions of impracticable ideals may surely look back upon the past of British India with as much pride as regret. Whatever be the view taken of the effect of English Government upon the happiness of the people, there is one conception of

the significance of Indian conquest which cannot fail to bring consolation to those who at heart desire the service of humanity. It may be that the Hindu or Musalmán who has acquired a smattering of English literature or a smattering of Anglo-Indian Law is no better and no wiser than his forefathers. It may be that the countryman whose fields are never safe from the machinations of the village banker, is no happier than his ancestors who any day might see from the village tower of refuge their harvest swept off by a raid. We may not have added an inch to the moral stature of "our Aryan brother," or lightened his burden by the weight of a straw. But this is beyond question,—that all thorough investigation by rigorously scientific methods in Language, in Mythology, in Juridical History, and in Social Philosophy will yield good fruit in due time. To discover, analyse, and explain Indian phenomena is to enlarge human experience, and to contribute with certainty to the advance of human development by the sure improvement of its theory.

The general conclusion is plain. It is that the investigation of Indian phenomena should be conducted, as it now is being conducted, on those principles which regulate inquiry into every department of merely human knowledge. It is not suggested that no knowledge is attainable except such as can emerge scatheless from the tests of that logic which the history of the inductive sciences has elaborated. That question is very far beyond the present scope. It is maintained that if we would understand the facts of the society which it is our fate to disintegrate and which it is our duty to reconstruct, we must set about our task armed with those methods of observation and reasoning which have already produced such great results in Philology, Mythology, and Jurisprudence. The extreme complexity of the facts before us, and the necessity that these facts should be examined with a full consciousness of their connection with similar facts in the past and present of Europe and of other parts of the world, are the great difficulties in our way. Yet we can have confidence in the Comparative Method, and can believe that no truthful analysis of customs which actually obtain, and of ideas which form the mental stock of the people we govern, can fail to be of service to those whose experience and information is other than our own although directed to the same end. In this faith we should patiently vivisect the society that lives and moves before us, conscientiously recording what we see with our own eyes, and hear with our own ears, in the certainty that such labours will supply knowledge of great value to Indian statesman, and data of great utility to men of modern learning, whose aim it is to explain human progress by ascertaining the origin and marking the successive phases of Language and Law and Society.

These remarks have not been made with any affectation of knowledge which it would take a life time to acquire. They have arisen spontaneously from a very obvious course of reading, and from a very short acquaintance with some of the practical difficulties of Indian rule. There is no pretence of original research in the vast subjects which have been handled. Some of the reflections offered may possibly be novel; but they are based upon facts which have been collected by others. The recognised authorities have been used, and have been used freely. It is hoped that the attempt to gather into a single focus a few of the rays of light which recent investigations have thrown upon the manner in which the languages, the ideas, and the social peculiarities of ancient and modern India should be observed, and to connect the kindling of the new spirit of inquiry with past history of Indian studies, may prove in some degree interesting and perhaps even suggestive to those who care to understand the nation whose affairs they administer.

C. LEWIS TUPPER.

THERMOPYLÆ.

Leonidas the Spartan
That wave-washed pass hath ta'en,
Where, mid dark oak-crowns, Mount Œta frowns
Over the fair blue main.
Calm he awaits, at those famed sea-gates,
The rush of the Persian host,
While his spears' glad sheen gleams bright between
The mountain and the coast.
Light-hearted, as when one who runs
In the great Olympian race,
Feels that the mighty crowd full soon
Will hail him first in place ;
So, thro' the gazing ranks he strains
Exultant toward the goal,
Though o'er his joy-thrilled heart not yet
The shouts of victory roll.
Now the high festal Days assert
Their venerable reign,
Where the summer moon's soft glory floods
Alphæus' sacred plain ;
Where to hold the proud Carneian games
The Spartan warriors throng,
And the victor-minstrels' chants resound
Eurotas' shores along.
And though against them speed amain
The myriads of the East,
Natheless the Greeks thro' Pelops' land
Will keep their solemn feast ;—
Will keep the feast with splendour meet,
Meanwhile Leonidas,
Obedient to the State's command,
Till death will hold the pass.
Three hundred chosen men-at-arms
That glorious Chief surround,
Who ever on the battle-day
First in the front are found.

The flower of all the band are they,
Who march with him to war,
Each in his mail of proof shines clear
And glittering as a star.
Bright memories haunt the hallowed ground,
The soft enchanted air,
Northward, Pclides' well-loved stream
Steals thro' the valley fair.
Lo, stately Ceta towers aloft !
Where Zeus' immortal son
Rose from his couch of fire to heaven,
His earthly sufferings done.
The Spartan loves no chase so well,
As the wary foe to track,
No music like the joyous flutes
That sound to the attack :
The war-shout thrills his cold, proud breast
With passionate delight,
As in Pyrrhic play on a festal day,
So bounds he to the fight.
But woe to him who trembles,
Or falters in the field,
Woe to the shuddering coward
Who throws away his shield !
Henceforth an outcast, loathed and shunned,
He treads his native earth,
The jost of old and young—yea, spurned
By her who gave him birth.
Now o'er Olympus' snow-crowned height
The Persian King sweeps on,
South thro' Thessalia's smiling vales
From savage Macedon.
Achaia shakes beneath his tread,
He skirts the Malian sea,
And, awful in repose, lies camped
By stern Thermopylæ.
Now, as the Persian hordes surged near,
Rejoicing in their might,
Chill terror seized and froze the Greeks,
And their hearts grew ripe for flight ;
But the King's voice is as a god's,
That voice they all obey,
Still 'gainst the foe the pass they keep
Submissive to his sway.

Lo ! where the Spartans guard the wall ;
 They wrestle and they run,
 As careless men, who lie at ease,
 After a victory won.
 As happy boys at play they sport
 In the soft translucent air,
 Or in the grateful shade reclined,
 They comb their flowing hair.

" Now tell me, Demaratus,
 What manner o' men be they,
 Who, blithe as guests expect the feast,
 Await the battle-day ?
 Brave champions have I seen, but ne'er
 Since mortal man drew breath,
 Heard I of those who, even as babes,
 Smile in the face of death. "

" Sir King, " said he, " that smile's more dread
 Than other warriors' frown ;
 Stern as the fir-capp'd peaks are they,
 That o'er their land look down.
 Thy myriads may not quell their *hearts* ,
 No victory shalt thou know,
 Till each and all have fallen in fight,
 Their faces to the foe ! "

Now, flushed with proud ancestral fame,
 The haughty Medes rush on,
 " This hour, " they say, " shall wash away
 The stain of Marathon, "
 Vainly they vaunt, who ne'er had met
 With foes untaught to yield,
 Their javelins break, like brittle reeds,
 Against the mighty shield.

On to the front, Hydarnes !
 Defeat thou may'st not know,
 When Xerxes views thee from above,
 The Immortals charge below !
 But as out to sea storm-beaten rocks
 The thundering billows fling,
 Even so the Spartans hurl them back,
 And thrice up-sprang the King.

His stern eyes flash with the rage and hate
 That a baffled despot knows,
 But proud and glad as a victor-god
 Each Grecian warrior glows.

No other land, nor other age
Such a feat of arms might boast,
For two long days they had fought and won,—
A handful 'gainst a host.

But who is he, who with stealthy tread,
As a murderer in his flight,
Steals wolf-like toward the Persian camp,
Thro' the deepening, dim twilight?
They seize him at the outer guard,
He kneels before the King—
“Now tell me true, thou craven Greek,
What tidings may'st thou bring?”

“A gloomy mountain-path there is,
That winds o'er Ceta's crown,
And to the eastward of the pass,
Thro' the woodlands dark goes down :—
Give me, O King, rich store of gold,
And I will be thy guide,
And lead thee, swooping on their rear,
Adown the mountain-side !”

Thus Ephialtes, and henceforth
His thrice-accursed name,
Glares thro' the darkness of the past,
In characters of flame.
Amid the traitors of all time
The Prince and Chief is he,
Who led the Persian, when the Greek
Fell at Thermopylæ.

• 'Tis now the first watch of the night,
And every sound is still,
• The waves are sleeping on the sea,
The leaves upon the hill.
When up that wild and lonely track,
Far o'er Asopus' flood,
Hydarnes, and his armed men,
Press hotly thro' the wood,
High up the rough ascent they toil,
They spurn' inglorious rest,
Till, as the reddening Morn blushed fair,
• Lo, Ceta's shaggy crest !
• Where a thousand Phocian men-at-arms
Near the mountain-summit stand,
Well may they keep that perilous steep,
Who guard their own loved land !

Each in his place the foe they face,
 With glittering helm and spear,
 When thro' the silence of the dawn
 The rustling leaves they hear.
 But they turn and yield the bloodless field,
 As the scathing arrows flew,
 Faithless to Freedom and to Greece,
 To their own selves untrue.
 Now, in prophetic signs well-skilled,
 And ancient mystic lore,
 Megistias the sooth-sayer
 Hath conned his victims o'er.
 But when the Greeks gazed on his face,
 The boldest scarce drew breath,
 Clear in his awe-struck eyes they read
 Their onward-rushing death.
 Now downward thro' the wood the scouts
 Are hurrying on amain,
 Dread sounds the beat of their flying feet,
 As toward the camp they strain—
 And far and fast, like a trumpet-blast,
 The warning voice sounds clear,
 "All's lost, ye may not save the pass,
 The Persian's in the rear!"
 Then, calm amid the tumult,
 Leonidas uprose,
 But his eyes flashed bright with the battle-light,
 As a stormy sunset glows.
 "Most shameful life, most glorious death,—
 Let others choose who will!
 But, Spartans, *we* must keep our ground,
 And fight the Passage still.
 "What death more blest than thus to fall
 For Sparta in the ranks!
 Though we ne'er may tread on summer-eves
 Eurotas' flowery banks;
 Though we may rouse the deer no more
 Thro' the fair Laconian glades,
 But Hermes, with relentless wand,
 Shall lead us to the shades.
 „How could we seek our fathers' homes,
 And to the people say,—
 Back have we come, who dared not throw
 Our well-loved lives away?

How could we face our warrior-peers,

Or the haughty matrons greet ?

Our city's very stones would rise,

And spurn our coward feet !

"Not this the choice of Heracles,

Our ancestor divine,

Nor this the choice of a Spartan King,

Of his old heroic line.

Nor, Spartans, yours, from the lineage proud,

Of the Dorian victors sprung,

For whom Terpander tuned his lyre,

For whom Tyrtæus sung.

"So, with calm brows and joyful hearts,

On, brothers, to the fight,

And future generations

Our epitaph shall write,

How three hundred Spartans fought and fell,

By the the side of the murmuring seas,

Led by Leonidas the King,

Of the race of Heracles ! "

Thus he, whereat his warriors cheered,

And the mighty battle-shout,

Breathing their terrible resolve,

O'er cliff and wave rang out,

And firm the men of Thespiæ stood,

From age to age goes down,

Linked with the glorious Spartan name,

Their blood-bought high renown.

'Twas then that Dienecees

Those deathless words out-spoke,

That cling to his bright name for aye,

As ivy round an oak.

"Their shafts," said one, "o'ercloud the sun,

And art thou not dismayed ? "

"Not so, by royal Zeus," said he,

"We fight them in the shade ! "

But now the foes were closing in

Before them and behind,

And they rushed forth to meet their death,

With a stern but tranquil mind,

And their bosoms throbbed with a god-like joy,

As the lofty Dorian strain

Burst glorious from the stormy flutes,

Far-sounding o'er the main.

As a mountain-torrent thunders down
Toward a vast majestic grave,
Where the great sea foams against the shore,
Fierce rolling wave on wave.
And the blue streak cleaves the billows green,
Swift darting from the land,—
Even so the Persian and the Greek
Are fighting hand-to-hand.

Full many a deed was wrought that day,
The brave man thrills to hear;
Full many a high-souled chieftain felt
The weighty Spartan spear.
For the Greeks have left the sheltering wall,
They sally from the pass,
And drive the Persian toward the sea,
And the terrible morass.

Till their stalwart arms are weak they strike,
And the boldest foemen quail,
Till the javelins, dyed in many a heart,
Are shivered on the mail :
Then flashed the well-tried swords, but now,
As the deadly Persian ring
Draws close—as falls a tower, so fell
Leonidas the King.

But the breast of each Greek warrior swelled
With a great and glorious grief ;
They yield no ground, but fight around
The body of their Chief.
Four times the myriads of the East
Press on to the attack,
Four times the unconquered sons of Greece
Have hurled those myriads back !

But as the battle raged amain,
The call of Death they hear,
When Hydarnes down the mountain-track
Comes surging on the rear.
Back toward the pass their way they cleft
With dauntless mien and proud,
Though wounded sore, their Chief they bore
Through the fatal arrow-cloud.

A gently-rising slope there is
Within the narrow way,
Where, faint and bleeding, but unquelled,
The heroes stand at bay:

And calm—yea, joyous as before,
When charging in the van,
Around their Leader's well-loved corpse,
Fall fighting to a man.
So fought, so died the Greeks. They laid
The warriors where they fell,
Where the mighty murmuring Ocean chants
His passionate farewell.
Where the far-resounding billows break—
What sepulchre more meet
Than the dust, that, when they rushed to war,
Was hallowed by their feet ?
And though the unconquerable Pass*
Be conquered by the main,
Though the snowy columns shine no more
Near bright Demeter's fane :
'Tis graven on the hearts of men,
And through all Time shall ring,
How the Spartans and the Thespians fell,
With Leonidas the King.

C. A. KELLY.

* "The pass itself was never stormed by main force. The waters of the Malian Gulf have retired so far to the north-east as to extend what was once a narrow defile into a broad and swampy plain."—*Wordsworth's Greece.*

CRITICAL NOTICES.

1. VERNACULAR LITERATURE.

Bishabriksha. A Tale. By Bankim Chandra Chattopádhya. Kánthálpára : 1280.

IT is, indeed, a pleasure to see a healthy tone of morals, fast winning its way into Bengáli fiction. Time was when the *Vidyásundara* or *Jivantára*, or some other equally indecent tale in verse would have been thought good reading by many grown-up natives ; or when the thrice-told tale of the undying friendship of the *rájá's*, the *pátra's*, the *vanik's*, and the *kotwál's* sons, with the eternal enchanted castles, and the damsel with closed eyes, would have lulled children to sleep.

“ But now the mystic tale that charmed of yore,
Can charm an *understanding* age no more.”

In these happily-stern days, every thing savouring of indecency or childishness, anything that does not either afford innocent amusement or add a little to our stock of knowledge, is sure to be put down with a high hand, consigned by the unanimous verdict of critics to the dead-store of the pastry-cook or the box-maker ; while works of real merit, like the *Durgeshanandini* or the *Bangádhípa-parájaya*, &c., are read and re-read until there are others to supply their place. Bábu Bankim Chandra is an author of too long and established a renown to need any special eulogy from us. His *Durgeshanandini* lately reviewed by Professor Cowell in *Macmillan*, was the first, and is unquestionably the best, *novel* in Bengal. The *Kapálakandalá*, though equally good, is not so well-spoken of by native readers, simply on account of their deep-rooted prejudice against a tragic end in a tale. Then followed the *Mrinálini* ; which, as it was not quite up to the mark, drew forth much hostile criticism. On the whole, however, his works have maintained a steady popularity ; and will doubtless occupy a conspicuous place in the future history of Bengáli literature.

This novel whose name appears at the head of this notice, now reprinted from the *Bangadarsana*,* was to be found in the *baitákháná* of every Bengáli Bábu throughout the whole of last year.

* By the way, we may remark here that Bábu Bankim has commenced another novel, *Chandrashe-* *khar* in his *Bangadarsana* : which we hope to review as soon as it is finished.

It is quite of a different character from its predecessors. While the others were all historical, "men and women as they are, and life as it is," is the motto of the present one. The hero, Nagendranáth, is a handsome and healthy man, immensely rich, liberally educated, wise in counsel and of amiable disposition. To crown all these felicities, he has a loving and virtuous wife in Suryamukhí. The reward of such a character is uninterrupted happiness, and Nagendranáth enjoyed it from an early age. But woe betide the day when his eyes fell in love on Kundanandíní, a beautiful and simple-hearted girl whom he had brought up from her infancy. Her beauty overcomes his heart and he marries her, apparently with the consent of Suryamukhí, who leaves his house and becomes a beggar. All Nagendra's worldly pleasures are blasted from that moment. His offence was dire; and his expiation, too, terrible. The virtuous lady at last returns; the family are all happy, but their happiness is not unmixed with grief, for their dear Kundá had taken poison to escape the heart-burnings caused by her husband's neglect. The other characters are all equally interesting. The affectionate Kamal, Nagendra's sister, with her oft-recurring loving pranks with her husband, Śríśh Chandra, is the veriest type of an educated Bengáli lady. Indeed, we are at a loss which of the trio to prefer most;—the calm and matronly Suryamukhí, the sedate and simple Kundá, or the loving Kamal. Leaving our readers to judge for themselves, we cannot help remarking that Suryamukhí we approach with reverence, Kundanandíní extorts our pity, while the exemplary Kamal commands our warmest affection. But the darker sides of humanity, too, are depicted with as much truth. Dabendra, the *vaishnaví* of the earlier part of the story, and an accomplished libertine, and Hirá, the servant-maid of Nagendra, both suffer the due reward of their vices.

The novel gives us, on the whole, much pleasant reading, though there are occasional blemishes. Towards the latter part of the work, where the author is at the highest pitch of pathos, there is a sort of languor and dulness in the conduct of the plot, which he scarce takes pains to conceal. Moreover, we are inclined to doubt whether the idea of a gentleman marrying a widow while he has another wife living, will be much relished by Bankim. Bábu's own countrymen; but the most objectionable part of the work is the invocation to the precious native *huká*. It was quite uncalled for, and might well have been dispensed with. Nevertheless the moral which the book inculcates is good. The miseries which Nagendranáth endured ought to be a lesson to those who cannot resist temptation, and have no control over the evil passions of their natures. The style is essentially Bábu Bankim's own; and we meet with the same witticisms, the sly hits, and the same displeasing combination of the grave with the ludicrous.

The characters are all what we should expect to see in 'real life'; and the vivid descriptions of scenery, natural and artificial, always our author's *forte*, are so telling that scarcely any Bengali novelist of the present day, except, perhaps, the writer of the *Bangádhīpa-parájaya*, can hope to match him in that line; the bold and beautiful manliness of his remarks on the causes and consequences of love will be appreciated by every thoughtful reader.

Hindudarmamarma. An exposition of the principles of the Hindu Creed. By the late Loknáth Basu. Second edition: Calcutta. Kávyaprakásh Press. 1280.

“IN ancient times when India was free, only *one* religion—Hinduism in its strictest sense—reigned supreme in this country; and the people being all pious, there were no very great controversies about religious topics. But as time rolled on, our country fell into the hands of foreigners of different religious persuasions, and impious doubts and irreligious questionings began to attack and shake the strongholds of the ancient Hindu faith. Our religion, unlike Islám and Christianity, cannot be learnt by mastering only one book. Our scriptures are composed of the voluminous treatises of the Rishis, and the still more ponderous tomes of their commentators; so that it is impossible to enter into the mysteries of our creed without considerable labour and diligent search. The present work is an attempt to explain the tenets of Hinduism to the people of Bengal in their own vernacular.” Such is the preamble of this learned Code. But what is Hinduism *pur et simple*? Is it to be gleaned from the yet undigested mass of Vedic lore, or the monotheistic tenets of the Aranyakas? Is it to be sought for, in the sometimes pantheistic, sometimes mystic speculations of the various schools of philosophy, or in the teaching of the Neo-Vedantic school of Saukarácháryya? Is it to be found in the baseless systems of those mytho-historical legends the Puránas—systems which “like momentary monsters rise and fall,” bearing no relation to *religion*, and scarcely worthy of a plain sensible man’s attention? Or is it a digest of all these taken together? In this latter view of the case this religion is everything and nothing. But in reality, Hinduism is not one definite religion, but a continuous series of innumerable doctrines taught by different sages at different periods of history all unlike in their nature;—the successive doctrines being wiped off from the minds of the people, leaving behind them a veneration for the teachers who, in their turn, came to be regarded as gods. On the other hand, we can scarcely bring ourselves to believe with our author that the objections to the established religion were suggested by influences from without. During five centuries of Moslem

rule in India, the Hindu theology received little colouring from Arabic philosophy or Persian poetry. On the contrary, the impulse of innovation was entirely indigenous; and the Buddhist revolution and the rise of the Vaishnavi sect are striking instances of the truth of our thesis. Gautama was a Hindu, and Chaitanya was a Hindu. None of them, as far as we are aware, were acquainted with the religion or philosophy of *Mlechchhas*, but they both preached religions which could never in their respective times be called Hinduism.

The work under review sets before the public, in an interlocutory and intelligible form, the principles of the Hindu religion. A gentleman, a Hindu, sick of the world and disgusted with the inconsistencies and contradictions in the teachings of different religions, and even in those of his own, and not knowing how to reconcile them, repairs to Vārānasi (Benares.) He meets with an ascetic there, and asks him to solve his doubts. The learned anchorite readily consents to do so; and forthwith commences his elaborate lecture, citing numerous texts having no connection with each other, and each of which, if widely interpreted, might form the basis of different religions. But the most remarkable part of the book is where the author defends idolatry and *polytheism*; where he, while acknowledging that God is Intelligent, Eternal, *One*, Omnipotent, and Omniscient, &c., lays down some devices which, he says, are resorted to in order effectually to worship Him.

First.—God being spiritual, is cognisable only by the mind; but as different persons may, according to their natural tendencies, form different conceptions of Him, it is necessary that every one should betake himself to some *Guru*, learn from him the name of the Deity, repeat that name frequently every day, and *contemplate the feet* of the spiritual preceptor.

Second.—The worship of a corporeal substance is easier than that of an incorporeal one, whose attributes can only be predicated negatively.

"These two devices," says our author, "underlie the root of Hinduism as prevalent in Bengal." But a religion, on which a blind reliance is placed by its followers as long as they do not understand the principles on which it is based, comes to be examined by the dictates of reason as soon as these principles are explained to them. A Hindu may, with regard to these devices, naturally ask therefore:—*What*, first of all, is the use of the *Guru*, when my own conscience convinces me by invincible proof that there is a Supreme Being, and tells me that under whatever name,—Jehovah or Jove, Khod or Brahma—I worship him, my prayer is always acceptable? Why should I contemplate in prayer the *feet* of the spiritual preceptor, who is but a mortal creature equally with myself, and

when I have means of knowing the Creator himself whether negatively or positively? Again;—Is it not irreverence shown to Him when man “the image of his Maker” bows down his head before an idol “of the earth, earthy,” and in downright disobedience of His direct commands? Can a mere toy represent Him, than whom nothing can be more great, more strange, and more beautiful? Strange, that an author who confesses the Unity of God in so many words, should tantalise his brain and torture the *Sāstras* for arguments to support *polytheism*! Is not this *felo-de-se*? There are various other topics discussed in this book; but most of them are so uninteresting that we do not consider it worth our while to dwell upon them.

Bábu Lokuáth has displayed considerable learning in this work; but his researches are wholly incomplete, as they do not in general go beyond the *Purānas*. With the Vedic literature, and the different schools of philosophy, he has very little concern, if any. As a rigid Hindu of the old school he still, to some extent, shares the old prejudice about Sudras being debarred from the privilege of reading the *Vedas*; and this it is, perhaps, that deterred him from troubling himself much about the divine songs of the primitive Aryans. He makes very little use of Reason in his exposition of Hinduism, and demands our blind Faith in everything, however inconsistent. For instance, while we are enjoined (1) to obey God *alone*, we are commanded (2) to worship the whole Hindu pantheon of three hundred and thirty millions of minor gods and goddesses as manifestations of the Divine Power—which it is impossible for frail man to comply with; and our astonishment is the greater, that for every hundred texts in support of the former injunction, there are thousands in support of the latter. But notwithstanding all that we have said above, this little book has its bright sides. It is written in a spirit of liberality creditable to its author, and almost unprecedented in Bengáli theology. It has no tendency to sectarianism; and its principles *mutatis mutandis*, may apply with equal force to *Sāktas* or *Vaishnavas*, *Saivas* or *Bāmácháris*. In conclusion, we recommend this book to the generality of Bengális who profess themselves to be Hindus without knowing what their religion really is; that they may have materials to work upon, and exercise their own judgment on what they read and what they believe.

Visayáchandraháś Kāvya. By Navina Chandra Chattopádhya-
ya. Calcutta: School Book Press.

IN our last number we considered the present author as a dramatist and a scholar; and we have much pleasure in looking upon him now as a poet. The age is past when critics presumed

to lay down rules for poetry, strict as the dogmas of heraldry, and more meaningless. The reaction against classicism has reached its climax. Even the Unities have died out ; and we are now prepared to accept anything that accords with reason, and promises pure reading. We are happy to say, Bábu Navina Chandra does not care much about canons and dogmas ; at least he has too much independence to have his judgment fettered by the trammels of arbitrary rules and a blind conservatism. He takes a well-known story from the Mahábhárata, and gives us a poem adorned with much that is his own. Dadhimukh, the Rájá of Kúndina, is murdered by his minister, who usurps the throne and banishes the pregnant queen. The princess takes shelter under her brother's roof, and there gives birth to a beautiful son ; but dies soon after. The child is taken care of by his grandmother, who names him Chandrahansa. No sooner does the minister hear of the birth of the prince, than he begins to devise means to dispose of him ; but all in vain. At last he assumes the disguise of an ascetic, and prevails upon the prince to join his son and live with him. The simple-hearted youth readily falls into the snare ; he goes to the appointed place, enters a garden adjoining the palace, and, weary with the journey, falls asleep. Here is the old story over again. The Vazír's daughter, Visayá, in the course of her rambles, accidentally comes to the place, falls in love with him. She reads the recommendatory letter which Chandrahansa has brought with him, and finds to her horror that her brother is therein enjoined to give him poison. With a presence of mind proverbially natural to the princesses of Oriental tales, Visayá manages to make the *visa* (विष poison) *visayá* (विषया her own name), a most desirable change. Chandrahansa awakes, presents himself before the minister's son and gives him the letter ; and the latter in his turn satisfies poetical justice by giving away his sister in marriage to Chandrahansa.

From an artistic point of view, this work has all the defects and all the excellencies of the author's style. The excellencies more than counterbalance the defects. The poem, written in varied metre, abounds in fine isolated passages and in charming conceits ; and everywhere, in spite of an occasional spasmodic action, it is evident that the author was vigilant to avoid obscurity and most of the other irregularities which characterise the writings of the generality of minor poets. There are faults too in the work, as every work of man must have. Our author's brain was so saturated with the writings of the Sanskrit poets, that his own powers of invention were blurred to a degree. This will account for the fact that the beginning of the fifth Canto is almost a literal paraphrase of Kálidása's description of Umá's beauty, in the *Kumáru Sambhava*. But nevertheless we are pleased with the poem ; and

are willing to repeat in respect of this, all that we have said of his other works.

The Meghaduta. By Kálidása, with the commentary of Mallinatha. Edited by Pránnáth Pandit ; with numerous parallel passages from other Sanskrit writers, and various readings, together with a Bengáli metrical translation. Válmiki Press. Calcutta.

IT is hardly necessary for us to say that this is an excellent book, excellently edited. The immortal works of Kálidása are always read with interest in all places where the Sanskrit literature is studied. If any one wishing to study the best epic we have, to amuse himself with our best drama and to taste the purest lyric elements of our poets, come to us for knowledge where these treasures are to be found, we refer him to the volumes of Kálidása, India's pride. Kálidása happily unites in himself the genius of Homer, of Shakespeare, and of Pindar. The works of so great a master spirit will, in whatever forms they may appear, always be hailed with joy.

It is no exaggeration to say that of all the editions extant this is one of the fairest and best. Printed on good paper, in good type, and with admirable neatness, it has decided advantages over its predecessors, if we except Professor Wilson's book alone. The power of external beauty is exercised over vulgar eyes only ; but when beauty walks hand in hand with excellent matter and manner, it increases our admiration. Not to speak of the invaluable commentary of Mallinatha, which alone is enough to make this book one of great public value, numerous parallel passages are inserted side by side with many different readings. These parallel passages do not always convey the same thought or use the same words in the same meaning. They prove how imitation fails in its attempt to rise to the height of the original ; and how the same facts call up different images in different minds. This is the only characteristic which distinguishes the edition ; and this, we may say, is the one quality which makes it especially readable and valuable. He who reads for reading's sake, and he who reads to write, are equally served.

On the metrical translation in Bengáli annexed to the book, we have to say only a word or two. We are aware that much censure has been directed against the language of the translation. Some have endeavoured to excuse the translator, as a foreigner in Bengal, a Kashmíri Bráhmaṇ ; but critical procedure denies the justice of this immunity. An author must consent to be tried by all the laws that bind the republic of

letters ; and their free operation must not be hindered by any personal considerations. Some have confessed that they would prefer to see the book without the translation. We do not agree with either. It has been said that the language is not good Bengáli because it has not its syntax ; and this we deny. True, the verses for the most part smack too much of the classical vintage ; but they can be, with few exceptions, explained according to the so-called grammar of our language. The Pandit's sentences are indeed tortuous, and as such their construction is not clear at the first reading. He very often uses the words of the original minus the terminations. This makes the style learned, suitable for learned readers alone. A good many passages there are that can only be understood on reference to the Sanskrit original. We do not mean that these are not faults, tending to lower the value of the work. But we do not think that these faults are so grave as to call for the excision of the translation.

The uniformity of versification is occasionally disturbed by the introduction of triplets and other metres, and not unfrequently by a defective *cæsura*. Diversion is welcome but not defect. Monotony grates on our ears and therefore demands a break. But the case is quite the contrary with rhythm. Prosody will not tolerate any rhythmical deformity : and all writers of verses should carefully guard against it.

It remains for us to notice the preface. The reason why we have deferred its consideration so long, is its importance. It is short, and is adorned with two pleasing discussions. Of these one refers to the age of the poet. After Professor Páranáth Tarkaváchaspati, the editor writes in his preface, "the three poems of Kálidása were written *before* B.C. 32, the *Jyotirbidávaran* in B.C. 32, and the dramas *after* B.C. 32. Kálidása also acknowledges himself a contemporary of Vicrama and the eight gems, Ghatacarpara, &c." The other relates to the origin of the work. Bábu Pránnáth believes, and believes against the authority of Mallinátha, that Kálidása took the idea of his *Meghaduta* from the *Yamaka Kávyá* of Ghatakarpara. The reasons he gives are two ; first, that Ghatakarpara was the contemporary and rival of our poet ; and secondly, because in the *Yamaka Kávyá*, a cloud is made to bear a message. It is not improbable, continues he, that when Ghatakarpara had exultingly finished reading his *Yamaka Kávyá*, Kálidása would seize upon the most poetic idea in the whole poem, and discarding the rhyme as a superfluous incumbrance and a tawdry ornament, and making choice of a versification better suited to so pathetic a subject, appear at the next sitting of the Gems with his *Meghaduta*. These discussions will be a great help to any future adventurers who may embark on the difficult and yet uncertain enterprise of blowing away the

dark clouds that shroud the history of Sanskrit literature. We are not in a position to assert whether these opinions are right or wrong. We can only say this much, that there exist other theories as to the age of Kālidāsa and other beliefs as to the origin of his *Meghaduta*. Space does not permit us to weigh the various theories; nor do we wish to do so. But it may not be unacceptable to our readers if we enunciate very briefly our own views on this moot point.

The authority of *Yyotirbidāvaran* is indeed unimpeachable. True, that Bābu Rām Dās Sen, in his notices of Kālidāsa, which he drew mainly from the *Indian Antiquary*, and which he published in a vernacular review about a year ago, put forth two arguments against the opinion of Professor Vachaspati. The first was that the style of *Yyotirbidāvaran* differs so widely from the style of the acknowledged works of Kālidāsa, that it cannot reasonably be ascribed to his pen. We admit the difference of style; we cannot but admit it; the very nature of the work drives us to this admission. As a scientific treatise dealing with symbols and formulae, it cannot glow with the richness of *Raghuvansa* or *Kumārasambhava*. If Milton had written a book on spherical trigonometry or a treatise on Integral Calculus, he would not, indeed could not, have displayed the divine sublimity of the *Paradise Lost*, under which his native language sank. The second argument is no more real. It is that the name of Jistnu is discovered in the *Yyotirbidāvaran* of Kālidāsa—a circumstance which, according to Bābu Rām Dās, unmistakeably proves the work to have been of the age of Harsavikrama, who flourished about 600 years after Christ. This is seemingly a more forcible argument than the former, inasmuch as it appears to point out a palpable inconsistency. But it at once breaks down, if it be made clear on the other hand, that *Jistnu* means simply *victorious* and seems hardly to be a proper name.

In his notices Bābu Rām Dās professes his faith with all humility. We find him inclined to be guided by the authority of the author of *Rājatarangini*. It is asserted by the latter that Kālidāsa, otherwise named *Mitragupta*, lived in the sixth century after Christ. This opinion is not quite new; it has found friends in Germany and Bombay. We need not discuss the soundness of the theory; it suffices to say that it well accords with the general tendency of the present day to regard our greatest master of the lyre as a modern poet, rather than one who lived in the obscure ages.

We are conscious that the results which modern researches have been able to work out are not satisfactory with respect to Kālidāsa. We know that many conjectures have been started, and received sometimes with favour, and sometimes without favour.

With this excuse, we proceed to risk a new conjecture which we fear may be looked upon by some as a paradox. We believe that certainty in the matter is at present unattainable; and we offer the following suggestions in all humility merely as guesses after truth. We are of opinion that most poets take their themes from obscure fables and dark traditions; and develop them, by force of their imagination, with additions taken from the circumstances in the midst of which they live. Thus Milton takes the idea of his Samson Agonistes from the ancient Jewish scriptures; but he grafts upon it the whole history of his dear Commonwealth, his animadversions on the ecclesiastical polity of Laud, his feelings towards the Puritans, his exultation at the victories of Cromwell and Lambert, his sorrows at the success of Monk, his mortifications at the re-establishment of ousted monarchy, his suspicions of personal danger from the cavaliers and his sorrow for the fall of the republic. So Shakspeare gives his Hamlet a local habitation and a name. So the Greeks celebrate under mythological names, the victories of their own kings. It is not an unnatural supposition that our Kálidása employed a similar method. Taking the names from our mythology he dressed his monarchs in his own clothes. The graphic descriptions that sparkle in his pages were not suggested by any poets before him; they are the sketches of his own imagination; the matter, not less than the manner, is his own. He is indebted to Válmikí for the name of Raghu only; all he says of his devotion, his heroic virtues, his military exploits, are of his own creation. As a creature of the poet's fancy, Raghu is bred up amidst, and conducted through, scenes that were enacted in the poet's age. The manners which the potent king exhibits, the customs he followed, the nations he subdues, are all of the poet's days. In fine the state of society and of politics of the poet's period is reflected on the mirror of his poems. Now, supposing this to be true, it is no strained construction to interpret the हुनारोद्धा (Hunábarodhá) whom Raghu vanquished in his career of conquest, as the *wives of the Huns*. The connexion is too clear to be missed by curious eyes. Besides this, we are furnished with other circumstances, which greatly conduce to increase this probability. In Chap. iv., verses 69 and 70, of his *Raghuvansa*, Kálidása describes his *Hunas* as a very haughty people, fond of horses—which formed a part of their wealth. This description harmonises with the words of Gibbon. He speaks of the unity of the Huns in more places than one, in vol. iv., chapter 26, of his *Decline and Fall of the Roman Empire*. Of the cavalry of their Tanjous (which was the appellation borne by the rustic chief), he writes that it frequently consisted of two or three hundred thousand men, formidable by the matchless dexterity with which they managed their bow

and their horses. Again, Raghu after having brought under subjection the long-bearded Parasikás—who were no doubt the Persians, as the epithet *Yavana* applied to them by the poet drives us to conclude, marched towards the north to establish his supremacy over the kings (or, to be more correct, chiefs) of the Huns. His geography also tells us that Kashmir was the nucleus of his military operations against the Huns;—a piece of information that can be credited without any violence on Gibbon's expression—"the vicinity of the Huns to the provinces of Persia." The question now, on which the issue of the case will depend, relates to the date of the Hunnish settlements in or on the skirts of Tartary. The immortal historian writes in clear terms:—that about the third century before Christ the great walls of China were raised against the barbarian invaders, who used to carry on their inroads into the recesses of the kingdom, and spread such devastation over it, that compared thereto, all the horrors of war known or heard of before were but a merev. It was about 48 A.D. or earlier that China, collected in her might, was able to change her defensive tactics into offensive. Headed by a most subtle general, the Chinese began to fall upon the Huns. The latter were completely reduced, and began to emigrate in two dense swarms. The stream of emigration commenced about 48 A.D. or a little later. Of the two swarms, we are now concerned with that which settled in Sogdiana. The date of their settlement has been fixed with precision at 100 A.D. It is not, therefore, quite chimerical to suppose that Kálidása flourished at the time when the Huns were on the east of Tartary or in Tartary itself. Hence the age of Kálidása should probably be taken to be somewhat before 100 A.D. This is not, indeed hostile to Professor Vachaspati's theory, literally followed by Bābu Prānāth; for he says that the date of our poet was about 32 B.C.

It is also worth notice that internal evidence shows the *Raghuvansa* to be the latest production of Kalidása; for it has all the master strokes of an experienced writer, far more than any of his other works, except the *Sakuntalā*.

As regards the other discussion in the preface, we have to say no more than this, that we see no good reason to set aside the theory of Mallinātha, who is, no doubt, the best authority on all such points. We are in doubt whether Ghatacarpara was a historic reality; and even if so, whether he was an author. The *Yamaka Kāvya*, reputed to be of Ghatacarpara, and the *Naloday* reputed to be of Kálidása, appear to us recent productions sent out with these names with a view to find a quick sale. A cursory glance at the books will at once make it clear. Compare the Sanskrit of the *Yamaka Kāvya* or of the *Naloday* with that of *Meghaduta* or *Raghuvansa*; they cannot possibly be of the same period. The

ninth Canto of *Raghuvansa* contains *Yamakas*; and these verses, when compared with the *Yamakas* of *Naloday*, cast the latter into the shade. The simple majesty of the one is in strong contrast to the cumbrous and tawdry decoration of the other. Likewise, the coarse poem, the *Ghatacarpara*, certainly is not of the same age with the *Kumara* and *Sakuntalâ* of Kâlidâsa. The Bombay scholars, headed by Bhaodaji, are disposed to ignore the reality of *Ghatacarpara* as a writer.

In conclusion we are glad to admit that the book under notice is one of the best of its kind that has yet come out of the press. We shall be glad to see similar editions of the other works of our great poets.

The Bangadarsana and the Bahuvirâha. A Pamphlet.

EVERY reader of the *Bangadarsana* is, perhaps, aware of the uncharitable treatment which Pandit Iswara Chandra Vidyasâgara's treatise on Polygamy received at its hands; and will hardly deny that the criticism was not quite in harmony with journalistic politeness. The pamphlet before us is a defence of Pandit Iswara Chandra's principles and assertions. The writer, as he himself informs us, is a reader of the *Bangadarsana*; and accordingly manifests its spirit in his defence. It is drawn up in the same rigorous and censorious spirit little modified. Not content with proving the fallacy of Vidyasâgara's opinions to the best of his power, though not to the full satisfaction of his readers, the writer of the review in the *Bangadarsana* proceeds a little farther to artfully speak against the character of the author and make insinuations about his hypocrisy. In the same spirit the pamphleteer questions the existence of judgment and reflection in the reviewer; nay, more than that, he goes on to expose him before the public by pointing out certain egregious grammatical inaccuracies that here and there disfigure his writings. As regards the matter, we think, without any prepossession, that most of the things contained in the pamphlet are true. We will not here discuss the question of polygamy, or the methods by which its evils may be removed; the time is now past for doing so. We simply intend here to touch slightly on a few points that are treated of in the pamphlet.

In the first place we are little disposed to abide by the opinion broached by the reviewer, that polygamy is fast dying out in our country. We concur with his antagonist who says that though the evil is being driven out of Calcutta and its neighbourhood, it is still rampant in Eastern Bengal. Vikrâmpur and Sunârganw bear certain testimony to the fact. In the second place we strongly back the side of the pamphleteer who vindicates, against the reviewer, the method which

Vidyasāgara adopts to prove the illegality of polygamy on the authority of our Shastras. By the way, the *Bangalore* eagerly seizes upon this opportunity to throw out hints that Vidyasāgara is little better than a *hypocrite*. He thinks that citing passages from the Shastras invariably implies a faith in them. A strange conclusion, indeed ! If a Christian quote verses from the *Purānas* to prove that the ancient Hindūs used to take beef and drink wine, he will at this rate run the risk of being considered a believer in the Pauranic doctrines by those who judge by the maxim of the Darsana. But to return. Pandit Iswara Chandra is fully justified in collecting passages from our scriptures to disabuse us of the mistaken notion, that our religion gives a sanction to polygamy. He comes, not an innovator with arbitrary innovations of his own make, but a re-constructor of native society with authorities and precedents in his hand. Social feelings are the best study of every social reformer. He must endeavour "to conciliate as much support and alienate as little sympathy as possible." This is the principle on which every reformer should act. Those who recognise it (few there are who do not) will not, we are sure, feel any scruples about the justness of Vidyasāgara's policy. Again, to a nation inured to tremendous superstition, imposed upon by a crafty priesthood, no argument is stronger, no eloquence more effective, no philosophy wiser, no rhetoric more persuasive, no exhortation nobler, than the word of the Shastras, the dictum of religion. The third thing relates to the question.—Shall we call it the aid of Government interference in order to repress the evil ? It is maintained on the one hand that the natural growth of society should not be disturbed by such influences. Vidyasāgara on the other hand prays for it. We are fully sensible of the importance of leaving society to itself. We fully understand that the business of society can be best performed by private and voluntary agency. But this doubtless supposes an advanced state. Our countrymen are too little advanced in moral and mental education to take care of themselves. That day is not nigh when polygamy shall receive a death-blow spontaneously administered by our community. The idol of Kulinism is still worshipped in our society. Moral equity is still often sacrificed on the altar of lucre. In fine, we are still much what we were. Putting aside the security of person and property, England has yet been able to do little to raise the moral status of our society. She has done very little, and much is left to be done. Such being the condition of society here, we see every reason to impugn a policy of *laissez faire*, when the interference comes not as an encroachment on our religion. Lastly, the reviewer writes, "Be Tarkavāchaspati what he may, good or bad, the public are not concerned with his goodness or badness." Here our pamphleteer

breaks in. He says that the learned reviewer does not seem to realise the force of the beautiful expression—"Example is one of the most potent of instructors, though it teaches without a tongue."

After all that we have said, it is hardly necessary for us to add that we have been pleased with the pamphlet. Its arguments are clear; and its style is good. In conclusion, for the sake of our country's welfare, we wish Vidyasāgara all success.

Jayadeva Charita: or a short Biographical account of Jayadeva the celebrated Author of the sweet Lyric Poem *Gita Govinda*. By Rajanī Kānta Gupta. Calcutta: G. P. Roy & Co's Press. Samvat 1930.

WHSOEVER has read with delight the masterpieces of the ancient Indian poets, must have wished that, to complete his pleasure, he had known something of the authors too,—“who they were, where born and how bred.” The classical scholar has at his finger's ends the main incidents in the lives of his Plato and Aristotle, Virgil and Horace; the student of English literature could tell you the daily doings, dressings, and dinings of his Chaucer and Spenser; but of the bards, who struck their lyres centuries ago in this country, and the sound of which rising like the peal of Pythia's awful organ, spread far beyond the seas, and enraptured the souls of Western nations, little is known even by their own countrymen. The desideratum has long been felt and deplored, but the research is so perplexing, and so much are the facts shrouded from view behind the veil of the obscure past, that scarcely any definite result has until lately been arrived at. Many who could not extricate themselves from the labyrinth which their search led them to, let their work alone in despair; while some in the depth of their erudition have made themselves the laughing stock of the world by their strange theories. But the book under review is undoubtedly an exception to the general rule. Bābu Rajanikanta, evidently a scholar of no mean acquirements, now offers to the public his little book of only 62 duodecimo pages, in which is embodied an amount of information, valuable, we dare say, even to a diligent antiquarian. Of course it cannot be expected that the life of Jayadeva could be swelled to a Boswellian volume. That is impossible at this remote age; enough, that some authentic account of the great poet of Bengal be obtained, and his age ascertained with tolerable accuracy. That Jayadeva was a native of Kēpduli, he himself tells us in his poem, and is all but universally known among Bengalis literate and illiterate; but the period in which he flourished, as well as other incidents in his life, had

been the subjects of argumentative conjecture for a long time. The former no doubt was ascertained by Professor Lethbridge pretty accurately, in his *History of India*, but for the latter many of our scholars had to grope altogether in the dark. After a careful search and a minute sifting of the contradictory evidence before him, our author has succeeded in throwing a flood of light, on that hitherto obscure corner of the history of Sanskrit literature and has made Jayadeva rather a real historical personage, than a mythic being. The character of Jayadeva, essentially a most pious man, is vividly drawn, but we should have expected from so able a scholar as our author, a more minute examination of the *Gīta Govinda* than we have before us. However, the value of the work is much; the research shown in it is worthy of the highest praise; and though as a picture of the man, the book would seem to foreigners to labour under the defect of a panegyric tone, it will nevertheless be accepted as the true one by those who have devoted their critical attention to the poem of Jayadeva. We earnestly recommend this book to our readers.

Hemaprabhā Nātaka. By Kamallochan Mukhopādhyāya. Calcutta: Samāchār Chandrikā Prss. 1280.

IN the long run, a poem does enough if it stir the latent feelings of the reader; a novel, if it is not mere dry reading; and a drama, if, when acted, it excites emotions pleasurable or otherwise in the minds of the audience. These general principles may with impunity be applied to the hundreds of volumes that are issuing every week from the native press, if not to works of a higher order. The play before us forms no exception to the general rule. The author aims at a pathetic tone throughout the work, which he attempts to attain by inserting the stage directions "sobs," "sighs," and "swobbs." Thinking himself successful in this respect, he tries to mitigate the sorrow of his reader by introducing the *Vidūshuka*—the *conviva* of Terence, the *gracioso*, the buffo, and even the clown of later days;—a character well known to the students of Sanskrit literature. As usual he is drawn in a state of chronic hunger, and his whole thoughts are centred on the roast and the *entremets*, but here he is quite out of place, and consequently disgusting. The other characters are all fanciful and without even a shadow of reality in them. The play is on the whole a conglomeration of ideas taken from many other dramas, joined together to serve the author's purpose. In fact if the whole aim of the drama be to hold the mirror up to nature, this play does not justify its existence.

2.—GENERAL LITERATURE.

Annals and Antiquities of Rájasthan, or the Central and Western Rajpoot States of India. By Lieutenant-Colonel James Tod, late Political Agent to the Western Rajpoot States. Second Edition. Higginbotham and Co.: Madras. 1873.

MESSRS. HIGGINBOTHAM AND CO. of Madras have of late given us the most unmistakable proofs that literary enterprise is anything but dead in India. We have recently had occasion to notice not a few excellent publications that have originated with them, such as Gover's *Folklore of Southern India*, and Garrett's *Classical Dictionary of India*. Messrs. Higginbotham's enterprise has, however, not been confined to strictly new and original publications; they are earning a heavy debt of gratitude from the reading public of India, and from Orientalists all over the world, by an admirable series of reprints of old Indian works that have become so scarce as to be practically inaccessible to most people. The re-publication of Colebrooke's *Essays* will be noticed by us elsewhere; the work, of which the title appears at the head of this article, is by far the most important of the series. It is contained in two large and handsome volumes, got up with evident care and printed with laudable accuracy. Its pleasing exterior will be a welcome adornment to the dingy shelves of an Indian library; of its interior we will now give a brief sketch—premising that we hope, in some early numbers of this *Review*, to attempt a more detailed examination of those portions of the work that are most valuable from an historical point of view. The portions to which we allude are those that treat of the *Feudal System of the Rájputs* and of the *Annals of Maiwár*; and we trust that the promise now given will be accepted by our readers as a sufficient apology for the brevity of the present notice.

No better choice than Tod's *Rájasthan* could possibly have been made, in selecting an old book for republication. It has long been so scarce that copies have only been obtainable at long intervals and at fancy prices; and yet it is a work that *must* be read by every one who wishes to acquire any real knowledge of Indian history. It has been largely used by every later writer on Indian antiquities; and all students of the history of this country are already familiar with large portions of it, which have been transferred either bodily or in substance to the pages of other Indian historians. We are all indebted to it for the clearest pictures that we possess of some of the most interesting periods of the history of India; and notably for the accounts of that most obscure and at the same time most romantic period immediately preceding and contemporaneous with the Muhammadan invasions. The description of the Feudal System as developed amongst the Rájput warriors, and the more

general accounts of the habits and customs of the Rájputís ancient and modern, are no less valuable. As far as we can judge from the light of more recent investigations, these accounts are as accurate as they are extensive and minute; and are the monuments of a singularly laborious and profound research, and of an enthusiastic devotion to the subject that has never been surpassed. It is to this latter cause, probably, that Colonel Tod's great work owes that charm of manner which renders it pleasant reading even to those who are not greatly interested in his important historical discoveries or conclusions. Without any high pretensions in point of style, Colonel Tod treats his theme with the simple eloquence of a lover. He loves the people of whom he writes, and the land which was the scene of their exploits. He is as proud of the old Rájput chivalry as if his own honour were concerned in its glories; and the result of this enthusiasm is, that his narratives are as pleasing and instructive to the reader now, as they were when first published nearly fifty years ago.

Colonel Tod was a fine type of a large class of the old Company's officers. He adopted the country in which his lot was cast, as his own; and with a strong taste for geographical, historical, and archaeological pursuits, he cultivated these sciences with especial reference to India, with patriotic zeal. During the eighteen years that he spent amongst the Western Rájputís, he made known to the world for the first time, the geography of Rájputána; and his map, which was printed in 1815, was one of the foundations of Lord Hastings' plan of operations in 1817-18. For five years, from 1817 to 1822, he was Political Agent in Rájputána; and during this period he earned the title of the restorer of Rájasthán. His attachment to the cause of the natives was so warm, that he was even suspected by the Calcutta Government—most unjustly, as was afterwards acknowledged—of corruption in his high office. Bishop Heber in his *Journal*, says of this suspicion, 'they (the Government) are now, I believe, well satisfied that their suspicions were groundless.' He adds, of Colonel Tod:—"His name appears to be held in a degree of affection and respect by all the upper and middling classes of society highly honourable to him." We need only say further of him, that he lived to see his great work, the *Annals of Rájasthán*, received in England by the King and the Company with the applause due to its great merits. He published it in 1829; and subsequently another work entitled 'Travels in Western India,' was put forth shortly before his death. He died in London in 1835.

The first chapter of the *Annals* is devoted to an account of the geography of the country. When we remember that this was written at a time when Rájasthán was known to very few Englishmen besides the author, who had to depend almost entirely on his

own personal knowledge, we might forgive Colonel Tod if his account had by this time become quite out of date. And indeed, if we look to minute points of accuracy, recent Reports of Political Agents and the numerous and varied sources of topographical and statistical information that we now possess about this part of India, have quite superseded our author's description. But it may fairly be doubted whether any other account that has yet been published, gives the reader such a vivid impression of the general appearance and character of the country. We will quote a few paragraphs to illustrate this statement of opinion :—

I shall conclude with a rapid sketch of the physiognomy of these regions ; minute and local descriptions will appear more appropriately in the respective historical portions.

Rajasthan presents a great variety of feature. Let me place the reader on the highest peak of the insulated Aboo, 'the saint's pinnacle' as it is termed, and guide his eye in a survey over this wide expanse, from the 'blue waters' of the Indus west, to the 'withy-covered' Betwa on the east. From this, the most elevated spot in Hindusthan, overlooking by fifteen hundred feet the Aravalli mountains, his eye descends to the plains of Medpāt (the classic term for Méwar), whose chief streams flowing from the base of the Aravalli, join the Bérís and Banás, and are prevented from uniting with the Chumbul only by the Pat-ár or plateau of Central India.

Ascending this plateau near the celebrated Chitore, let the eye deviate slightly from the direct eastern line, and pursue the only practicable path by Ruttungurh, and Singolli, to Kotah, and he will observe its three successive steppes, the miniature representation of those of Russian Tartary. Let the observer here glance across the Chumbul and traverse Harouti to its eastern frontier, guarded by the fortress of Shahábad : thence abruptly descend the plateau to the level of the Sindé, still proceeding eastward, until the table-mountain, the western limit of Boondelkhund, affords a resting point.

To render this more distinct, I present a profile of the tract described from Aboo to Kotra on the Bérwa : from Aboo to the Chumbul, the result of barometrical measurement, and from the latter to the Bétwa from my general observations of the irregularities of surface. The result is, that, the Bétwa at Kotra is one thousand feet above the sea level, and one thousand lower than the City and Valley of Oodipoor, which again is on the same level with the base of Aboo, two thousand feet above the sea. This line, the general direction of which is but a short distance from the tropic, is about six geographic degrees in length : yet is this small space highly diversified, both in its inhabitants and the production of the soil, whether hidden or revealed.

Let us now from our elevated station (still turned to the east) carry the eye both south and north of the line described, which nearly bisects Media-désá, 'the central land' of Rájasthan ; best defined by the course of the Chumbul and its tributary streams, to its confluence with the Jumna ; while the regions west of the transalpine Aravalli may as justly be defined western Rajasthan.

Looking to the south, the eye rests on the long extended and strongly defined line of the Vindhya mountains, the proper bounds of Hindusthan and the Dekhan. Though, from our elevated stand on 'the Saint's Pinnacle' of Aboo, we look down on the Vindhya as a range of diminished importance, it is that our position is the least favourable to viewing its grandeur, which would be most apparent from the south ; though throughout this skirt of descent, irregular elevations attain a height of many hundred feet above such points of its abrupt descent.

The Aravulli itself may be said to connect with the Vindhya, and the point of junction to be towards Champanér; though it might be as correct to say the Aravulli thence rose upon and stretched from the Vindhya whilst it is much less elevated than more to the north, it presents bold features throughout, south by Lunawara, Dongurpoor, and Edur, to Amba Bhawani and Oodipoor.

Still looking from Aboo over the table-land of Malwa, we observe her plains of black loam furrowed by the numerous streams from the highest points of the Vindhya, pursuing their northerly course; some meandering through vallies or falling over precipices; others bearing down all opposition, and actually forcing an exit through the central plateau to join the Chambul.

Having thus glanced at the south, let us cast the eye north of this line, and pause on the alpine Aravulli. Let us take a section of it, from the capital, Oodipoor, the line of our station on Aboo, passing through Oguna, Punniwa, and Meerpoor, to the western descent near Sirohi, a space of nearly sixty miles in a direct line, where 'hills o'er hills and alps on alps arise,' from the ascent at Oodipoor to the descent to Marwar. All this space to the Sirohi frontier is inhabited by communities of the aboriginal races, living in a state of primeval and almost savage independence, owning no paramount power, paying no tribute, but with all the simplicity of republics; their leaders, with the title of Rawut, being hereditary. Thus the Rawut of the Oguna commune can assemble five thousand bows, and several others can on occasion muster considerable numbers. Their habitations are dispersed through the vallies in small rude hamlets, near their pastures or places of defence.

The geographical account of Rájasthán is followed by a number of chapters containing a general sketch of the history of the various Rájput tribes. The earlier parts of this account are necessarily mythological or legendary, rather than historical; and are mainly derived from the Puránas, especially the *Bhagavata*, the *Skanda*, the *Agni*, and the *Bhavishtya* Puránas. From these Colonel Tod collected all the legends and tales, that are usually credited by Hindus, about the cosmogony, the deluge of Manu, the patriarchal and heroic ages; and these tales he has attempted, with the boldness which was characteristic of the period, to rationalise. "Though they interpose," he says, "Seas of curd, milk, or wine, we should not reject strong and evident facts, because subsequent ignorant interpolators filled up the page with puerilities." The accounts of the great Solar and Lunar races, the *Suryya Vansa* and the *Chandra Vansa*, are taken mainly from the *Bhagavata* and the *Agni* Puránas; and notwithstanding the vast mass of puerilities contained therein, Colonel Tod managed to extract a good many points of real historical value, which have subsequently been more fully investigated and methodised by other labourers in the same field. The early union of the royal and priestly offices among the Hindú Aryans is clearly demonstrated from the Pauranic genealogies; and an admirable instance of 'Survival' in this respect, is afforded by the ceremonies observed by the Mahárájánás of Maiwár or Udaipur, when they visit the temple of the Sun, the tutelary deity of their race—on such occasions, the Ráná becomes *ex-officio* the high-priest for the day. The most important of the

genealogies which Colonel Tod endeavored to elucidate and rationalise, were—(1) the race of Suryya, the Solar line reigning at various times in Ayodhyá, in Saurashtra, and in Maiwár; (2) the race of Chandra, the Lunar monarchs of Indraprastha or Delhi; and (3) the dynasties of Magadha, at first belonging to the Chandra race, and subsequently of the Nag, the Maurya, and other lines. From the time of Rama and Krishna to that of Vikramáditya and even later, these genealogies are to a large extent mythical; but still many valuable historical facts and conclusions are gleaned from them by the learned author. Vikramáditya himself was a sort of King Arthur to the Rájputs; and may be regarded as the incarnation or material centre of numerous popular legends. He belonged to one of the chief branches of the fire-born Rájputs, the Agnikulas. The genesis of the legend of the Agnikulas, and the heroic history of one of their noblest divisions, the Pramaras, are thus given by Colonel Tod:—

Agnikulas.—1st, *Pramara*. There are four races to whom the Hindu genealogists have given Agni, or the element of fire, as progenitor. The Agnikulas are therefore the sons of Vulcan, as the others are of Sol, Mercurius, and Terra.

The Agnikulas are the Pramara, the Purihara, the Chalook or Solanki, and the Chohan.

That these races, the sons of Agni, were but regenerated, and converted by the Brahmins to fight their battles, the clearest interpretation of their allegorical history will disclose; and, as the most ancient of their inscriptions are in the Pali character, discovered wherever the Buddhist religion prevailed their being declared of the race of Tusta or Takshac, warrants our asserting the Agnikulas to be of this same race, which invaded India about two centuries before Christ. It was about this period that Parswa, the twenty-third Boodha, appeared in India; his Symbol, the Serpent.

The legend of the Snake (Takshac) escaping with the celebrated work *Pingal*, which was recovered by Garoora, the eagle of Krishna, is purely allegorical; and descriptive of the contentions between the followers of Parswa, figured under his emblem, the Snake, and those of Krishna, depicted under his sign, the eagle.

The worshipper of Soorya probably recovered their power on the exterminating civil wars of the Lunar races, but the creation of the Agnikulas is expressly stated to be for the preservation of the altars of Val, or Iswara, against the Dytes, or Atheists.

The celebrated Aboo, or Ar-boodha, the Olympus of Rajasthan, was the scene of contention between the ministers of Soorya and these Titans, and their relation might, with the aid of imagination, be equally amusing with the Titanic war of the ancient poets of the West.

The Boodhists claim it for Adnath, their first Boodha; the Brahmins for Iswara, or, as the local divinity, styled Achil-es.

The Agnicooda is still shewn on the summit of Aboo, where the four races were created by the Brahmins to fight the battles of Achil-es and polytheism, against the monotheistic Boodhists, represented as the Serpents, or Takshacs.

The probable period of this conversion has been hinted at, but of the dynasties issuing from the Agnikulas, many of the princes professed the Boodhist or Jain faith, to periods so late as the Mahomedan invasion.

The Pramara, though not as this name implies, the 'chief-warrior'; was the most potent of the Agnicūlas. He sent forth thirty-five Sachæ, or branches, several of whom enjoyed extensive sovereignties. 'The world is the Pramara's,' is an ancient saying, denoting their extensive sway; and the '*No kole Maroo's'hulli*' signified the nine divisions into which the country, from the Sutledge to the ocean, was partitioned amongst them. Mahéswar, Dhar, Mandoo, Oojein, Chandrabhaga, Cheetore, Aboo, Chandravati, M'how Maidana, Parmavati, Omrakote, Bekher, Lodurva, and Puttun, are the most conspicuous of the capitals they conquered or founded.

Though the Pramara family never equalled in wealth the famed Solanki princes of Anhilwara, or shone with such lustre as the Chohan, it attained a wider range and an earlier consolidation of dominion than either, and far excelled in all, the Purihara, the last and least of the Agnicūlas, which it long held tributary.

Mahéswar, the ancient seat of the Hya kings, appears to have been the first seat of government of the Pramaras. They subsequently founded Waranagar, and Mandoo on the crest of the Vindhya hills; and to them is even attributed the city of Oojein, the first meridian of the Hindus, and the seat of Vicrama.

There are numerous records of the family, fixing eras in their history of more modern times; and it is to be hoped that the interpretation of yet undeciphered inscriptions, may carry us back beyond the seventh century.

The era of Bhoj, the son of Moonj, has been satisfactorily settled; and an inscription in the nail-headed character, carries it back a step further, and elicits an historical fact of infinite value, giving the date of the last prince of the Pramaras (Cheetore, and the consequent accession of the Gehlotes.

The Nerbudda was no limit to the power of the Pramaras. About the very period of the foregoing inscription, Ram Pramara held his court in Telungana, and is invested by the Chohan Bard, Chund, with the dignity of paramount sovereign of India, and head of a splendid feudal association, whose members became independent on his death. The Bard makes this a voluntary act of the Pramaras; but coupled with the Gehlote's violent acquisition of Cheetore, we may suppose the successor of Ram was unable to maintain such supremacy.

While Hindu literature survives, the name of Bhoj Pramara and "the nine Gems" of his court cannot perish; though it is difficult to say which of the three princes of this name is particularly alluded to, as they all appear to have been patrons of science.

Chandragopta, the supposed opponent of Alexander, was a Mori, and in the sacred genealogies is declared of the race of Takshac. The ancient inscriptions of the Pramaras, of which the Mori is a principal branch, declare it of the race of Tusta and Takshac, as does that now given from the seat of their power Cheetore.

Salivahana, the conqueror of Vicramaditya, was a Takshac, and his era set aside that of the Tuár in the Dekhan.

Not one remnant of independence exists to mark the greatness of the Pramaras; ruins are the sole records of their power. The prince of Dhát, in the Indian desert, is the last phantom of royalty of the race; and the descendant of the prince who protected Hemayoon, when driven from the throne of Timoor, in whose capital, Omrakote, the Great Akber was born, is at the foot of fortune's ladder; his throne in the desert, the footstool of the Bulotch, on whose bounty he is dependent for support.

Among the thirty-five Sachæ of the Pramaras the Vihl was eminent; the princes of which line appear to have been lords of Chandravati, at the foot of the Aravulli.

The Rao of Bijolli, one of the sixteen superior nobles of the Rana's court,

is a Primary of the ancient stock of Dhar, and perhaps its most respectable representative.

A chapter is devoted by Colonel Tod to some remarkable analogies between the manners and customs of the Rájputés and those of the Scythians as described by Herodotus and of the ancient Scandinavians as disclosed by modern researches into the antiquities of the three northern kingdoms of Europe. These analogies are perhaps more curious than significant ; at any rate, the tendency of recent criticism is to look with caution upon the bold generalisations so common amongst the Orientalists of the last century—generalisations which have been at once surpassed and discredited by the more accurate philological discoveries of the present century. The *History of the Rájput tribes* ends with a catalogue of the thirty-six royal races of the Rájputés ; followed by some reflections on the present political state of the Rájput tribes, which are full of interest even at the present day though written fifty years ago.

We have here analysed only a comparatively small portion of this grand work ; to the most valuable portions we hope to devote an article or two hereafter. The other Books are—a sketch of a Feudal System in Rajasthán—Annals of Mewar—Religious Establishments, Festivals, and Customs of Mewar—Annals of Marwar—Annals of Bikaner—Annals of Jessulmer—Sketch of the Indian Desert—Annals of Amber or Dhoondar—Shekhawut Federation—Annals of Haravati—together with two Personal Narratives, containing most interesting accounts of the author's own experiences and travels in Rájputána. Of all these Books, those on the Annals of Maiwar (or Mewar) and Marwar (or Jodhpur) are by far the most full and valuable ; and to them we intend to return at another time. Every page of these chronicles teems with information at once most valuable and most interesting ; and with the results of the most extensive and profound research. The little band of students of Indian History may well be congratulated on the fact that these rich mines of knowledge are now made easily accessible to all, in Messrs. Higginbotham's cheap and beautiful edition.

A Cyclopædia of India, and of Eastern and Southern Asia—Commercial, Industrial and Scientific: Products of the Mineral, Vegetable and Animal Kingdoms, Useful Arts and Manufactures. Edited by Edward Balfour, I.r.c.s.e., Deputy Inspector General of Hospitals, Madras Army ; Corresponding Member of the Imperial Geological Institute, Vienna. Madras : 1871.

THE five large volumes before us represent a most praiseworthy attempt to cope with what must always be a stupendous

undertaking—the endeavour to collect in one compilation and in an alphabetical arrangement the information on Oriental matter that is scattered in such numerous and inaccessible works as the *Asiatic Researches*, the *Journals* of the various Asiatic Societies, and elsewhere. The work is really an imperial one; and we trust that Dr. Balfour will be liberally helped by the Indian Governments in his enterprise. In a country like India, where nearly every one of the ruling classes has to learn everything about the country, its peoples, its products, its manners and customs, even its history, at a comparatively late period in life; the great need of such a work as a cyclopædia is obvious. The best scholar amongst us must meet daily with words and names about which he knows little or nothing; and hitherto there has not been any source of information available, to which the reader or the writer may turn to solve his doubts or refresh his memory on such occasions. Moreover the knowledge gained by one enquirer has been for the most part inaccessible to his successors; for few possess the means of bringing together in one library the numerous scattered works of orientalists, and no one could possibly read them all, even if they were so collected.

Dr. Balfour enjoyed special facilities for the great work which he undertook in the compilation of an Oriental Cyclopædia. He says on this point, in the preface to his first edition:—

My avocations while employed in India, more particularly in the past seven years, have rendered necessary for me a collection of books of reference relating to India and the East, somewhat more numerous and varied in character than private individuals generally possess; whilst my employment as Secretary to the Madras Central Committees for the Great Exhibition of 1851, the Madras Exhibition of 1855, the Universal Exhibition held in Paris in 1857, and the Madras Exhibition of 1857, combined with my duties (since 1855), as officer in charge of the Government Central Museum, have brought under my notice a rare variety of eastern products and subjects of interest; and thinking that, before quitting the countries in which I have dwelt for nearly a quarter of a century, I might with advantage leave to my successors in a portable form, the notes made on the products of the East that have come under my notice, combined with an abstract of the useful information respecting them contained in my books, I have been led to show the results in the present shape.

A work of this aim and character might doubtless fully occupy the life-time of several men of varied attainments; and this *Cyclopædia of India and of Eastern and Southern Asia*, may therefore be regarded only as a first attempt towards the kind of book, the want of which has been long and generally felt.

Of course the literary value of a Cyclopædia can only be estimated in detail; and depends partly on the completeness of the whole work, partly on the judgment with which the subjects discussed have been selected, and chiefly on the literary value of the several articles. To form some judgment on these points, we have looked

through the volumes of Dr. Balfour's work with considerable care, though of course cursorily; and we have no hesitation in stating our belief that few if any points of importance—points, that is, that are likely to crop up in the course of general reading or writing on Oriental subjects—are omitted by the learned Editor. The scientific parts—the Botany, Ornithology, &c., of India—appear to be extraordinarily full and exhaustive; whilst Dr. Balfour's work will be of immense use to every Indian reader or writer, if only as a Gazetteer of Southern and Eastern Asia.

To give our readers a fair idea of the great practical value of this great work, it occurred to us that it might be a good plan to take any two topics of current interest, at hazard, and extract what Dr. Balfour has to say about the persons or places concerned. Writing in Bengal, two such topics suggest themselves just now:—(1) the Dutch war in Sumatra, (2) the *cause célèbre* now proceeding at Hugli, relating to some alleged offences of the Mahanta of the great shrine at Tārākeshwar. For information about the scene of the first topic, we consult Dr. Balfour's article on Achén; it is as follows:—

Acheen (Sumatra) Athi of the Malays, Atsjin of the Dutch, Lat. 5° 22' N., Long. 95° 46' E. The capital of a kingdom of the same name, situated near the N. W. extreme of Sumatra, and formerly one of the principal trading ports of the Indian Archipelago, its position, near the entrance of the Straits of Malacca, enabling it to command the navigation of what was then the only Channel of communication between the Islands of the Indian Archipelago and the countries of the West. Every vessel entering the Straits was then obliged to call at Acheen to obtain a pass, but the arrival of Europeans in these seas who were by no means inclined to acknowledge the authority of a sovereign who was looked upon as a barbarian, set at defiance the assumed authority of the kings of Acheen, and it has gradually decreased in importance until the present time. This monarchy arose from the usurpation of Sultan Saleh-ood-din in A. D. 1521, previous to which time, Acheen had been a province of Pedir and governed by a viceroy from that kingdom. The kingdom extended, in former times, from the North-West promontory of the island of Sumatra (called Acheen Head, a well known and bold landfall for ships) to beyond Batu Bara river, on the North side of the island. But the territory in modern times, on the north coast, may be said to commence from Diamond Point, as it has ceased to exercise authority over Langhat, Delli, &c. The Acheenese differ much in their persons from the other Sumatrans, being in general rather shorter and of a darker complexion. They are by no means, in their present state, a genuine people, but are supposed to be a mixture of Battas and Malays, with Chuliah, as they term the natives of the west of India. The town of Acheen is situated on the banks of a river, which, after traversing a broad plain bounded on each side by ranges of hills, forms a delta and falls into the sea by several mouths. The roads are tolerably secure, especially from April to November, when the south-west monsoon prevails and blows usually off the land. During the remainder of the year, north-west gales are sometimes experienced, but the islands in the offing afford considerable shelter, and a ship well found in ground tackle is not likely to incur any danger of being driven on shore. The usual anchorage is in from 9 to 15 fathoms, with the principal mouth of the river from S. to S. E., and about 2½ or 3 miles offshore. They

MISCELLANEOUS NOTICES.

Poetry—Its Chief Attributes stated and illustrated;—a Lecture delivered before the Calcutta Young Men's Christian Association. By Edward Storrow.

Is this a *critical* age or is it a *creative* one, is the question that the Reviewer ever asks himself 'as volumes of Poetry and Essays about Poetry come in upon him at the same time. Here we have this Essay on Poetry, side by side with the Poems of Snellius Shickhardus, and in every publisher's circular we see Theories of Poetry running the race with Poems themselves. Such a state of matters would lead us to the conclusion that our age is at once critical and creative, or that we have come to the close of a critical period, and that only the first fruits of new intellectual life and originality are being gathered.

Mr. Storrow, in the Lecture before us, seems to have had it as his object, simply to recommend Poetry to the study of the youths whom he addressed, by decking it out in its fairest garb, pointing out in detail some of its beauties, and shewing not a few of its prettinesses. He makes no attempt to enter into the philosophy of the matter, nor logically to treat it in its various divisions, but simply seems to give forth the results of a little quiet meditation on Poetry in general, and on no division of it in particular. He has accumulated not a little gentle criticism of a quiet Addisonian character, on a few favourite poets, whom he uses as illustrations of some of those attributes of Poetry, which he details. And yet after all, when we have read this Lecture we are precisely in the position of the Lecturer, not at all nearer the hidden queen of song and imagination than when we set out. We have seen her garden and the walks approaching to her temple, and heard a few of the officiating priests speak under her inspiration, and have been pleased by the scene, but still she is as mysteriously invisible as ever, a very *Om* of mystery.

When we say then that there is much pleasant talk about Poetry, its attributes, its metres, its appearance, its influences, we give the full contents of the Lecture. In composition it is somewhat unequal, and we must say the author by no means illustrates his subject in his own style. There are, however, a few good passages,—good both in thought and language.

Just as we divide all writings into poetry and prose, so may we say that to all things in the universe there is a poetic as well as a prosaic side. And this is but according to the great law of balancing and antithesis, which everywhere we trace. We speak of darkness and we comprehend in it the idea of light; life finds its antagonist in death; sin necessarily presupposes holiness; time which is measurable, suggests eternity which is immeasurable; matter has its opposite in spirit, as truth has in error. So poetry has her domain, and claims to inherit, along with her coarse and vulgar brother, a share in the world's possessions; *aya*, and in

the free use of all that is good and beautiful beyond the limits of the world she takes precedence of him. With a charm as potent as the wand of the enchanter Ismeno, or the wonderful lamp of Alladeen, she goes forth to walk through the earth and to gaze on the stars, and whatever she touches and whatever she looks on, becomes radiant with beauty and redolent with odours. The finest and the most precious things are hers; she usurps no power, she robs others of no treasure; she does but enrich and gladden all those who are wise enough to distinguish her footsteps and bid her welcome. The sunny side of all things belongs to her. The spring is the poetry of the year, the dance is the poetry of motion, music is the poetry of sound, childhood is the poetry of life, the stars are the poetry of the heavens, flowers are the poetry of the earth, and woman is the poetry of man.

One of the best features of the Lecture is the liberal breadth of view that is taken of Literature and Literary men. The illustrations are not taken from one poet, nor one age, nor one school, but extend over all good poets.

Poets true to their instincts will ever choose themes of an elevated order, and which illustrate deep feeling in some of its rainbow hues. The chequered wanderings of Ulysses; the grand and mysterious expedition of Ram; the awful secrets of the Inferno; the sin and the sorrow of Don Roderic; the deep, and true, and sorrowful loves of Abelard and Eloise; the trial and the discipline of a Faust, a Festus, a Walter and a Balder; the darkening fall of angelic natures; the romance of chivalry; the tale of war; the illustration of woman's fascination, of woman's faithfulness, and of woman's sorrows; the history of adventure; the description of the supernatural and the obscure, the representation of nature in her most grand, most lovely and most terrible forms, are fit themes for the poet's song.

We know that we shall not agree with the author when we point out his concluding paragraph as the worst part of his Lecture. Epithet-writers, unless they are very great men, can never succeed in conveying their meaning truthfully or beautifully. Homer and Milton alone have rendered their Epithets immortal, and have expressed in one word what little minds would have spread over a page. Not only may the correctness of many of the following be questioned, as applied to the authors mentioned, but the style is false and disagreeable. Our young men have too much of this already.

Thus have I said a few things—alas how few—about our English poets and poetry. I have brought you a flower from one parterre and a curious plant from another. I have shewn you, as best I could, where lie the lowly valleys in which the lily and the rose are found, and where are the mountain sides which bear the oak and tremble with the cataract. I have pointed out the fantastic pagodas, the chaste, grand Greek temples, the sublime Gothic minsters, and the lovely cottages so variously adorned, which glorify the slopes of that mountain which the Muses have made their own. I have shewn you the deep woods where Dryads and Fairies hide, the murmuring brooks where Naiads dwell, and the stately rivers, lakes, and seas over which reign mightier beings than they. But it is not given me to lead you through the whole of that extensive and glorious realm, which the poets have created and which they have devoted to the pleasure of mankind. This kingdom is the fairest and the noblest which the intellectual prowess of Englishmen has won. Nowhere have they gathered greener laurels, or proved more triumphantly that they possess the loftiest endowments which God gives to favoured men. The picturesqueness of Chaucer, the sublimity of Milton, the splendid fancy of Spenser, and the all-comprehensive genius of Shakspeare, the mellifluousness of Pope, the robust vigour of Dryden, the devoutness of Herbert, the pensive tenderness of Goldsmith, the descriptiveness of Thomson, the graceful-

ness of Gray, the truthfulness of Cowper, the pathos of Otway, the delicacy of Campbell, the glitter of Moore, the reflectiveness of Wordsworth, the homeliness of Crabbe, the passionateness of Burns, the sensuousness of Keats, the mystic depth of Coleridge, the energy of Byron, the variety of Scott, the elegant fancifulness of Tennyson, the high-toned religiousness of Keble—all these illustrate an amount of poetic wealth such as no other country can equal. The names of our greatest poets will live, long as the remembrance of England herself shall live. Poetry crowns its worshipping high priests with a wreath more durable than is bestowed by philosophy or science; or than adorns the brows of any one else who treads the pleasant walks of literature. Time in her awful flight obscures the glory of a Roger Bacon, a Duns Scotus, and a Roger Ascham; but our poets' names shine out from the dark, obscure past, with the calm splendour of

"A bright particular star"

as though time were loath to extinguish so much beauty, or had no power over forms, which like Orpheus, are half divine.

The Lecture is on the whole one that does credit to the Author, and ought to have enlightened his audience.

A Manual of Ancient History, from the remotest Times to the Overthrow of the Western Empire, A. D. 476. By Dr. Leonhard Schmitz, F. R. S. E. Edinburgh, 1855.

It is only by virtue of its chapter on India, that this "Manual" comes within our jurisdiction. But the very existence of this chapter in such a work is a significant phenomenon.

We continually see, not merely that the actual sphere of human knowledge is widening, but that that part of it, on which youthful eyes are allowed to gaze, is ever being extended. Our children are now taught books and subjects, of which we, when young, never dreamed; and education, stepping forth into the wide domain of human knowledge in all its extent, claims every object as its own, from which it may teach lessons of wisdom or goodness. Our "school series," our "school book associations," our "manuals," our "hand-books," our "circles of knowledge," bear testimony to this.

The book before us is another evidence of it. The name of Dr. Schmitz is a sufficient guarantee for its accuracy, its scholarship, and its adaptation to educational purposes. Well known as one of our best classical scholars at home, the successful translator of all Niebuhr's works, and the author of many of our first school books, the fame that he has acquired will be increased by the production of this. His other histories have already been introduced into all the large schools and colleges of England, and even those in India, both East Indian and Native, now use them as the most approved text-books.

We can fully recommend this work as containing the chief matter of the author's previous histories of Greece and Rome, and in addition, chapters on Egypt, China, India, Persia and the other Asiatic

Empires. The only drawback to the work is its rather defective account of India, which to students of this land, is so very important. But two alternatives lay before the author, and he has chosen perhaps, the wiser of them; either to state in general terms, all that we know certainly of India in ages that were only semi-historical, or at once to enter into the weary detail and endless doubts, that the researches of such scholars as Major Rennell, Tod, and James Prinsep, have caused. He has chosen the former course, in itself, perhaps, the wiser, but to Indian students, who view the early history of their own land as the most important, the least satisfactory. Had Dr. Schmitz written from an Indian stand-point, however, his book would have been, on the whole, less useful. The chronology adopted seems, most correct, and nearly to correspond with that generally acknowledged.

“Beginning of the historical period. Origin of the most ancient parts of Vedas, B. C. 1400.

Origin of Buddhism, B. C. 525.

Alexander the Great in India, B. C. 327.

King Asoca promotes Buddhism, which is introduced into Ceylon, Tibet, China, &c., B. C. 250.

King Vikramāditya, patron of literature. Kalidasa, the dramatic poet, A. D. 1.”

Elphinstone makes the era of the great Malwa king, A. D. 78.

This “Manual” of Dr. Schmitz is quite up with the times. This was to be expected of the pupil and translator of Niebuhr. From the very first the key-note of comparative philology, as the illustrator and assister of early history, is struck, and all throughout the doubtful periods, its stores are drawn upon. We have noticed it not merely to recommend its adoption in all schools and colleges in India, but on account of the large space that is devoted to the Asiatic Empires. A three years’ course of historical study could be well conducted on the basis of such a work as this, beginning with Rome, following that up with Greece, and finally studying the other and less-known ancient Empires.

Selections from the Records of Government, North Western Provinces, Part XX. Report on Educational Books in the Vernacular.

WE have increasing evidences of the immense amount of educational activity that is now being everywhere manifested in India. Notwithstanding the somewhat equivocal conduct of the Central Government with regard to the carrying out of the provisions of the last educational despatch, private parties everywhere, and not a few

of the heads of Government Colleges, as well as Missionaries and those of a Missionary spirit, are working for themselves at the practical solution of many an educational problem.

More *honest* and truly earnest activity however has been manifested in the North Western Provinces, than in any other part of India. The spirit of Thomason has not yet died out, and the very districts where no Missionary society brings its benign influences to bear on barbarism, ignorance and idolatry, are those where the best Government system is most fully carried out. Like all great men, Thomason was not only great in himself, but he selected for his assistants men who either possessed, or to whom he could impart, much of his own spirit. Hence, now that he has gone, the state of such colleges as Benares under Dr. Ballantyne, and Ajmeer, till lately under Dr. Buch, gives us the fondest hopes for the future intellectual advancement of the hardy sons of North Western India.

It is seldom that we notice such 'Selections' as these, because they contain rather the raw material for future works on India, than any definite or methodically arranged information. They are 'contributions towards' its future merely; and the historian will soon find a mass of excellent matter, from which he may draw both history and its philosophy. But this Report before us is so full of curious statements, regarding the adaptation of English Literature to the Hindoo mind, and it throws so much light on curious philological niceties, that we would recommend it to all who feel interested in such subjects. It contains a catalogue of vernacular educational works, with their contents, authors, prices, and where they may be procured; doing in fact for North Western India and its dialects, what Mr. Long has done for Bengal. We see traces of Dr. Ballantyne and his scholarship in almost the whole work.

Perhaps the most curious part of the whole is a notice by Mr. Muir, on "the Life of Cicero (Delhi Society's Publications) translated from Plutarch's Lives, by Pundit Motee Lall, Senior Scholar, Delhi College." The object of the translation seems to have been to give a creditable amount of information to his countrymen on the subject, but he takes for granted too much as already known by his readers. Such might be all very well in the case of well-educated Europeans, but it is too much to expect that classical allusions, and the whole paraphernalia of Roman laws and Government, will be understood by natives. The attempt, however, to introduce them to the knowledge of classical subjects, is most praise-worthy. It is right, if they are to be imbued with the spirit of English Literature, which all in Government Colleges seem to have in view, that they should learn something of that source from which it draws so much of its glorious inspiration. It is in this respect that all English studies have been imperfectly carried on in

India, the native students being utterly ignorant of the spirit of antiquity and all classical references, and what is far worse, knowing nothing of those elements which enter so largely into the structure and history of the language.

In such a work as this, a difficulty would meet the translator at the outset, not merely how to communicate all the peculiar ideas of antiquity in the vernacular, in their full force and beauty, but how to express such proper names as Cæsar, Pompey, Octavius, &c. Mr. Muir seems to think that in this he has failed. He says, "many of the names I cannot make out; the following will be deciphered with some difficulty even by the Classical Scholar." These we have Romanised for the benefit of the unlearned :—

Tracumverato	...	...	...	...	.. Aetoorca.
Cecelisia	...	...	...	...	.. Korncleas Lenthus.
Kaipelosia	...	...	...	...	.. Ooktaveas.

On the contrary, the translators of Arnott's Physics seem to have succeeded much better :—

Much of the excellency of their translation I conceive to be due to the conciseness and precision, and, as a consequence, the elegance of the equivalents which they have constructed and supplied for corresponding terms and expressions of the original. And they have consistently adhered, throughout the translation, to the equivalents adopted at the outset; *e. g.* the terms gravitation, attraction, and cohesion, have been rendered respectively Kushush Sukul and Kushush, and Kushush Ethesal; and whenever these expressions are repeated in the original, the same renderings re-appear in the translation. Open the Oordoo work at what page you will, the same fidelity and accuracy of translation will be found. I will here give a few specimens of what I conceive to be very appropriate renderings of corresponding terms of the original treatise :—

Refraction of a ray	...	...	..	..	... Enheraf, Shaa.
A Refracting ray	...	..	..	..	... Shaa Munhurouf.
Reflection from a surface...	...	...	...	...	... Munukus hojana Shaa ka sutha se.
A luminous body	...	...	...	...	... Gismen roushun bezzat.
Convex and concave mirrors	...	...	...	...	... Shesha Ma hadub O. Mujoof.
Solid and fluid bodies	...	...	...	..	... Agisam Munjumed O. Seale.
Moving and quiescent ditto	...	..	..	..	... A gisam mut uhuruk O. Sakin.
Velocity	...	...	...	...	... Mukdar rafter.
Momentum	...	...	...	...	... Mukdar Sudma.
Inertia	...	...	...	...	... Khaseet adma turnk.
Repulsion	...	...	...	...	... Khaseet Mudafent.

And so on; the specimens may be multiplied *ad infinitum*. The style and diction of the translation also, as might be predicted from its excellency in the respect noticed above, are terse and elegant. There are no instances in this translation, of a variety of superfluous words employed to express a single idea, for which the translator was not sufficient master of the language to furnish a single equivalent. Every sentence of the original has been translated, not paraphrased, and that, too, with a fidelity and accuracy, which an intimate knowledge of the subjects themselves could alone have ensured.

Vernacular translation in this country has been going on altogether a wrong tack, and perhaps necessarily so. Arbitrarily has the literature of the west been too often expressed in the dialects of the East, with a wonderful ignorance of the very rudimental principles

of translation. We have yet to come to that high stage of intellectual progress in India, where native students shall in their own natural language express their own ideas, with all the accuracy that a knowledge of the science of the west, and all the elegance that a power over their own mother tongue, can give.

Two Lectures on the Laws of Public Health, as applied to the Opinions of the people of India, delivered before the Bethune Society of Calcutta. By Norman Chevers, M. D., Bengal Medical Service. Calcutta, 1855.

It has been computed, that in India alone, out of a population of 40,000,000, Cholera destroyed between the years 1817 and 1830, a brief period in the history of a nation, no less than 18,000,000 of human beings! This is, indeed, an appalling fact, sinking into utter insignificance all other human calamities. Since the last mentioned year, cholera has embraced the whole habitable globe in its deadly grasp, and continues to be the great scourge of the time in which we live. That the poison which causes such wide-spread and devastating misery, is generated in circumstances which are susceptible of control, and perhaps of removal by human agency, is believed by many eminent members of the medical profession. Such being the case, it is impossible to exaggerate the value of all researches into the laws which regulate the public health, and of all efforts made to enlighten the said public upon the preventible causes of disease.

The application of the true principles of ventilation and drainage has already been attended, in Europe, with such eminent success, as to warrant the entertainment of a well-founded hope and belief, that similar means of protection will afford equal immunity in tropical countries.

The average duration of life in England has, undoubtedly, been considerably increased, since the publication of the Carlisle Tables; and some diseases, which were formerly as fatal as the most endemic of an eastern delta, have been absolutely eradicated.

James the I., and Oliver Cromwell, died of ague, which was so fatal in London in 1558, that the living could scarcely bury the dead. Bishop Burnet, in his history of the Reformation, says, that it was so universal in London, that it raged like the plague.

A popular belief formerly existed, even among the learned, in England, and is still entertained in Italy, that the poison of Malaria is an antidote for some intractable forms of disease. This belief was embodied in the proverb that

“An ague in spring
Is physic for a king.”

An eminent physician, in the early part of the present century, afflicted with a mortal disease, and impressed with a conviction of the truth of the current delusion, travelled into all the fenny and marshy parts of England, in the vain hope of acquiring the specific : but failing in the object of his search, he returned to London to die, declaring that the country was ruined by drainage, as there was not an ague to be caught in it.

In one year in Europe, little more than two centuries ago, the plague carried off half a million of victims. The oldest living physicians in the ancient haunts of the distemper that

“Kindles a fiery boil upon the skin,
And putrefies the breast of blooming health,”

has not seen a single case of that loathsome pestilence !

The scurvy that destroyed Lord Anson's fleet, and rendered lengthened voyages well nigh impracticable, in former times, has disappeared from all ships in which ordinary sanitary precautions have been observed.

The destructive ravages of small pox have been mitigated to an extraordinary extent, by the immortal discovery of Jenner ; and it is affirmed that the disease might be entirely eradicated, if the antidote were universally applied.

Without believing then with Lord Bacon, that the daily swallowing of a small dose of nitre will prolong life to an indefinite period ; or with the Roman superstition, that the driving of a nail into the wall of the Temple of Jupiter will arrest a pestilence ; or yielding our faith to the virtues assigned to the rust of the spear of Telephus, the sympathetic powder of Sir Kenelm Digby, or the tar-water of the learned metaphysician who denied the existence of matter, and yet believed in a universal remedy—there can be no doubt that the vast majority of mankind die from diseases that are more or less preventible, and that it is perfectly possible to prolong the space of human existence to the extent designed by the Creator, by the observance of a few general principles, simple of application, easy to understand, and certain to succeed, if properly directed.

The two lectures of Dr. Chevers, which have suggested these remarks, contain, in a brief compass, well and pleasantly told, much valuable information upon some important points connected with the health of the Metropolis of British India. The topics discussed are :—

The prevention of famine and pestilence

Water supply.

Household and town drainage, and cleanliness.

Disposal of the dead.

Personal habits.

Upon each of these subjects the remarks are sound, sensible, and practical. The learned and the unlearned may peruse them with pleasure and profit. Such papers cannot fail to be eminently useful

to those to whom they are specially addressed. It is to be hoped that they will not be passed by unheeded by the rising generation of educated natives, from whom much will be expected in the future amelioration, mental and physical, of the condition of the great mass of their countrymen.

History of the Suppression of Infanticide in Western India, under the Government of Bombay, including Notices of the Provinces and Tribes in which the practice has prevailed. By John Wilson, D. D., F. R. S., &c. Bombay, 1855.

IN one of the earliest Numbers of the *Review*, this subject of Infanticide was fully taken up, its causes, and the evidence of its existence stated, and the tribes among whom it prevailed described. In this work the whole subject is taken up its widest extent, and all notices and facts regarding it brought down to the present day. The whole is treated with the learning of a scholar, and the benevolent enthusiasm of a philanthropic missionary. There are many startling facts here given that ought to rouse all who labour and pray for India's advancement, from their indifference to the cause of woman, and ought to direct their energies to some great national means, by which her position may be raised and her soul educated.

The author opens his work with many interesting facts regarding infanticide among the Phœnicians, Canaanites, Chinese, Scandinavians, Greeks and Romans. In the more civilised of these nations, the causes seem invariably to have been poverty, and regard to mistaken notions about the principles of population and political economy; while in those more barbarous, the same causes seem to have existed as in India;—a deadening of the most ineradicable emotions of the human soul, by the influences of a horrid superstition, an arbitrary law, and a state of society in which polygamy and marriage-sales prevailed. But no nation seems to have equalled India in the uniform practice of infanticide pursued in certain tribes, and these extending over a large district of Northern and Western India, from generation to generation, and attended by the same cruel circumstances and revolting heartlessness. First then, most holy Shastras degrade women to a very low level, and then the arbitrary enactments of Brahmins, and the traditional usages of certain tribes and localities, make her position often one inferior to that of the brutes.

We rejoice to see the Hon'ble Jonathan Duncan put in his right place with regard, not only to Infanticide, but to a wise plan that would tend to ameliorate the condition of the Hindoos, long ere any scholar had thought of turning his attention to the language and customs of the Hindoos for philological or archaeological pur-

poses. Duncan saw that, if he was to govern his large district well at and round about Benares, of which he was Resident, he must gain access to the hearts of his subjects through their own tongue. He it was who first directed special attention to the existence of Infanticide in certain tribes, and from the interest that he took in the matter, and the efforts that he put forth, both at Benares, and afterwards as Governor of Bombay, his name ought to be ranked with those of Howard and Clarkson.

His habits of mind and his former experience led him, when he came to the Western Presidency, to indulge the inquisitiveness which was natural to him, and which he had elsewhere cultivated with so much advantage to himself and the people placed under his authority. He was not only accessible to the natives; but, with due restrictions, he systematically sought to maintain with them regular intercourse. He personally conversed and corresponded with them, whenever he found them capable of giving him useful and practical information. When he was on his first visit to Surat in 1800, he asked Kripa Rama, the minister of the Nawab of that city, whether any traces of Infanticide were found in his locality, so contiguous to Baroch, the ancient Barygaza, where Captain Wilford had imagined it to exist in the days of the Greeks. The reply which he received was this — "Heretofore I have heard people say that among the tribe of Rajput, and especially among the Rajas of that class, the birth of a daughter in their houses was considered as disgraceful; on which account their women refused to let their newly-born daughters have access to their milk, and put them in any way to death; but this practice is not general through all the sub-divisions of their tribe, though in several places they do thus stony-heartedly kill them."

Mr. Duncan — to abridge his own narrative, which here commences, — returned to Bombay, in July, 1800. He had no farther opportunity of prosecuting his inquiries into what foundation there might be for believing the practice of female Infanticide to obtain in any places of the West of India, till the fact was again incidentally brought to his notice, between two and three years afterwards, by a native lady, — her name is worthy of remembrance, — Gajrá Bâ, a descendant of one of the Gâikawâd Rajas of Gujarat, who had repaired to Bombay on political grounds.

The work begun by Mr. Duncan was carried out with vigour by Colonel Walker and Captain Carnac. They prosecuted their enquiries into the subject with great vigour in the provinces of Khâthiâwâd and Kachh, and finally succeeded in getting the Jâdejâs to sign an agreement for ever to give up female Infanticide. But it was found that in eight years after this was signed, *only fifteen* Jâdejâ females were known to have been saved. Several plans were proposed by Carnac, as the creation of an establishment to suppress female Infanticide, and the defraying of the expenses of the nuptials of a Jâdejâ girl. But to these the Governor in Council declined to accede, still urging the employment of moral power. Even Mountstuart Elphinstone, himself, however, at this time Governor, although he visited the districts, felt at a loss how to act.

No effectual check can be imposed on this atrocious practice, he wrote, as long as it is so completely congenial to the general feeling of the people, unless by employing hired agents, as proposed by Major Ballantine, whose duty it should be to detect offenders of this description; and such a measure would lead to so much intrusion into the most private and domestic proceedings of the superior castes (among whom alone Infanticide prevails,) and would be open to so many abuses on the part of the informers, that I do not think the chance of success

would compensate for the disaffection which it would create. It may also be doubted how far we have a right to interfere to such an extraordinary pitch with the private life of a people with whose civil government and internal police we do not pretend to have any concern. We must therefore be content to follow the footsteps of our predecessors (without attempting to go beyond them) in their most meritorious endeavours to discountenance this enormity; and we may safely flatter ourselves, that as the manners of the people become softened by a continuance of tranquillity and good order, they will gradually discontinue a practice which is not more inconsistent with reason, than repugnant to natural instinct.

Captain Ballantine was at this time in the political agency of Kháthiáwád, and on his being succeeded by Captain Barnewall, in 1821, Elphinstone again directed his attention to the matter. One new plan adopted was, to "throw all fines levied on chiefs for other offences, as well as for Infanticide, into a Fund to be distributed in proportion to children so preserved."

To Captain Barnewall's letter was appended a statement of the probable expense of the marriage of the 189 daughters of the Jádejás then existing, dividing them into four classes, and calculating the number of marriages likely to take place each year from the apparent age of the parties concerned. The total sum required amounted to no less an amount than Rupees 355,590, which, if actually paid, would have turned the heads of all the Brahmins, Bháttas, Cháráns, and other religious mendicants of the province. The fines levied for 1821,—1821, which seem to have been principally inflicted for connivance at the depredations of the Khámán Káthís, amounted only to Rs. 40,233-1-33 $\frac{1}{4}$; and they had all been credited to the military expenses incurred in the suppression of those depredations.

Still the Bombay Government did not abandon the idea of forming what has since been called "The Infanticide Fund," or what might more appropriately have been denominated "The Infanticide Prevention Fund." It expended its "great approbation" to the proceedings of Captain Barnewall as attested by him in his second letter now quoted; directed that all fines under Rs. 20,000, which might not be given up to the sufferers on whom they might be levied, should be allotted to the Infanticide Fund; and requested Mr. John Pollard Willoughby, of the Civil Service, Assistant in charge of the Residency in Baroda, to endeavour to prevail on the Gáikawád Government to co-operate in the measures proposed, by devoting its portion of fines raised in Káthiáwád to a similar purpose.

This Infanticide Fund, first arranged by the wise and benevolent Elphinstone, had a great influence in suppressing the crime. But still much was to be done, and Mr. Willoughby now took the whole matter into his hands, and carried it out with wisdom and vigour, getting as full and accurate a census of the Jádejás, as possible. He proceeded to lay down new plans which were highly approved of by the Bombay Government. He urged a still more complete census, the establishment of a system of registration of births, marriages and deaths. An annual report from the political agent, more strictness in causing the Jádejá chiefs to carry out their engagements, rewards to informers, contracts and stipulations between superior and inferior Rajput chiefs, and large rewards to the chiefs who had already given up the practice. Mr. Willoughby thus concludes his admirable report:

Such are the measures which, after a long and deep meditation on the subject, I presume to propose for the consideration of Government; and I beg to state that they are considered by natives of the province competent to form a correct judgment, calculated to give increased efficiency to the measures adopted by

Colonel Walker for the suppression of this terrible crime. It is scarcely necessary, I hope, to state that I feel, as every man, and more particularly every Christian should, most deeply interested in its complete abolition, or that I shall strenuously exert myself to ensure success to whatever subsidiary measure may be directed to compel obedience on the part of the Jádajás to their engagements. Both Captain Lang and myself embrace every opportunity of speaking upon the subject, with the detestation it merits, and of stimulating the tribe among which the custom prevailed to abandon it, and thereby restore themselves to that scale among human beings which they forfeited from its prevalence among them. By unceasing endeavours to expose the enormity of the offence, and to shew that it is at direct variance with the precepts inculcated by the religion of those who perpetrate it; by extending favor to those who renounce the practice; by promulgating the fixed resolution of Government to punish with the utmost severity those who still adhere to it; and from the success, partial as I fear it must be regarded, which has attended our efforts for its discontinuance, I am sanguine that through the Divine blessing complete success may be ultimately obtained.

It is interesting to read the replies sent in by the various Jádajá chiefs to Government, when they issued their orders and instructions. Here is a specimen:—

Your favour, together with the proclamation, has been received. The Jádajás, in putting their daughters to death, commit a great sin. The Shastrias describe this sin as one of the greatest enormity. The custom of infanticide is not sanctioned by any of the Puranas that I have ever heard of. A woman cannot be deprived of life, even if she is the most depraved and abandoned of her sex. The guilt, therefore, of putting an innocent infant to death is of the blackest dye. The British Government, in abolishing this inhuman practice from motives of religion and humanity, has gained for itself the highest reward of virtue. There are certain tribes of Rajputs who put their daughters to death. The causes which appear to have led to the practice are mentioned below. These causes, however, no longer exist, and it is unaccountable their still continuing to practice the crime.

The causes I mentioned are as follows:—1. Up to the reign of Prithiraj Chohá, the bride was the property of the strongest who succeeded in taking possession of her person from the pavilion erected to celebrate her marriage. The contentions which ensued in consequence were of the bloodiest description. 2. The Samrá tribe of Rajputs gave a daughter in marriage amongst the Samrá tribe of Rajputs. Some cause originating in this connexion led to a lasting rupture between the tribes. 3. The daughter of the Raja of Tháthá was carried away by the Khalifah or Diwan of Baghdat.* 4. The Musalmans during their reign forcibly

* This was a considerable time before the Sammáas of Sindh came into notice, the Khalif referred to being Wafid, who died A. H. 96 or A. D. 715. It was in connexion with the daughters of Dahir of Dewal, or Tháthá, that Muhammad Kasim, his general, the conqueror of Sindh and the Punjab, met his death. Respecting this affair the most satisfactory account is the following, from the pen of Sir Henry Elliot:—"Our authorities differ respecting the mode of Muhammad Kasim's death; but it must be admitted that there is much more probability in the statement of the *Futúhu-l-Buldan* than in that of the *Chach-Náma*, which is followed by all the later writers. The former states, that he was seized, fettered, imprisoned, and tortured to death by the Khalif's sanction; the latter, that the two daughters of Dahir, who had been sent to the capital for the Khalif's harem, complained that they had already been violated by their father's conqueror; upon which, the Khalif, in a fit of wrath, ordered that he should be sewn up in a raw cowhide, and so transmitted to Damascus. When his body was exhibited to the unfortunate girls, they declared that their assertion was untrue, and that they had uttered it merely to be avenged on the destroyer of their family and country. The tale goes on to say, that the capricious tyrant, in an agony of remorse for his hasty conduct, ordered them to be immured alive. Others say, they were tied to horses' tails, and so dragged about the city. The whole story certainly savours more of romance than reality, but the reason which has been advanced against it—namely, that the sewing up in a hide was a

possessed themselves of the daughters of the Rajputs, and great hatred and opposition between the castes ensued in consequence.

To the above causes was owing the practice amongst the Jádéjás of putting their daughters to death. The present times are, however, those of religion and virtue and violence cannot be exercised by one individual against another. It is therefore unnecessary to continue the practice of infanticide. The greater portion of Jádéjás do not adopt this dreadful crime; but those who do so will abstain, in obedience to the will of Government. As you have written to me to co-operate in the abolition of the custom, and as it is a work of piety, no endeavours will be spared on my part. Write in return commanding me to do you service." *From Rancholji, Dican of Junagad* *

Willoughby was succeeded by Erskine, and he by Major Jacob. For the first time is the true and only measure for suppressing the crime alluded to—the diffusion of education and morality among the tribes; but the Governor declined to mix up the two questions, although there was at this time (1840) a balance of Rs. 1,16,786 in favour of the Infanticide Fund. But Jacob was not the first to think of the introduction of education into these provinces. Both Dr. Wilson himself, and the Rev. W. Fyvie, of Surat, drew attention to the necessity of this, and the Irish Presbyterian Church sent out the Rev. James Glasgow and the Rev. Alexander Kerr, whose hands were afterwards strengthened by new labourers.

But after all education was the only lever to rouse these races above so barbarous a custom, and this finally accomplished it. Government gave 600 Rupees for a Prize Essay on the subject, that was gained by Bhau Daji, and when Sir Henry Pottinger succeeded to the residency at Bahy the capital of Kach, he found all ready for carrying out to the fullest extent the most enlightened and liberal plans. In 1825 he entered on his office, at the time when the Rao Desulgi, the prince elected by the Jádéjás, was only about eight years of age; with this boy he used all his influence :—

Had he been his own son, he could not have been more attentive than he was to his intellectual and social interests. After securing for him instruction in the Indian languages, he placed him, for the acquisition of English and general culture, under the care of the Rev. James Gray, formerly of the High School of

Tátár mode of punishment, and not Arab—constitutes no valid objection: for, though it undoubtedly was practised by the Tátárs—as when the savage Halagú murdered the last Kálm of Bagdad—yet an earlier example might have been discovered in the Arab annals. Even before the time of the Sindh conquest, we find the adherents of the first Mu'awiya enclosing the body of the Governor of Egypt in the carcass of an ass, and burning both to ashes. And as for the general tone of romance which runs through the version of Muhammad Kasim's death, we find a case somewhat parallel in contemporary history; for when Musá the conqueror of Spain, was treated with similar indignity by Zulaimán—the same relentless Khalif, who persecuted the conqueror of Sindh—and was lingering in misery and exile at Mecca, the head of his son, who had been murdered at Cordova, was thrown down at his father's feet, while the tyrant's messenger taunted him in the midst of his agony and despair."—Appendix to Arabs of Sindh, unpublished, pp. 31, 32.

* This Brahman-minister of the Muhammadan state of Junagad was one of the best informed natives whom we have met in India. He had even a tolerable knowledge of Arabic, a language to which few of his caste ever pay any attention. He takes an intelligent view of some of the causes of Infanticide.

- Edinburgh, but then the chaplain of the station, specially selected for it by Sir John Malcolm,—a gentleman of unbounded benevolence of character, distinguished literary taste, poetical distinction and exemplary Christian zeal. Mr Gray was enthusiastically fond both of his charge and its special duties, to which he devoted as much attention as the usages and interruptions of a Rajput palace permitted. The progress of his pupil was in every respect as satisfactory as could have been expected; and he displayed the most amiable and hopeful traits of character and ardent attachment to his tutor, to whose respected memory, on his lamented death in September 1830, he erected a handsome monument in the camp burying-ground at Bhuj.* Sir John Malcolm regretted much that he did not know a chaplain at this time on the Bombay establishment fitted, by his knowledge of the Indian languages and customs, and desire of native improvement, to take Mr. Gray's place; and failing to get one of the Scotch missionaries, with whom he entered into communication on the subject, to leave his peculiar evangelistic work to undertake that duty,—the great importance of which he readily admitted,—and to enter the educational service of Government with liberal offers of preferment in that department, he left the tutorship vacant for a short time. On the recommendation of Colonel Pottinger, Captain John Crofton of H. M.'s 6th Regiment, a gentleman who had received a university education at Trinity College, Dublin, ultimately succeeded Mr. Gray, in 1832, and faithfully and effectively continued the work of instruction which had been so hopefully begun. The periodical reports of the progress of the prince by that officer to Colonel Pottinger were very encouraging, while at the same time they were judicious and discriminative.

This youth on commencing his reign, at once declared it as his mission to suppress infanticide and to prevent an increase of the Pawaiyas (Eunuchs and Sodomites). In 1840 Captain Melville gave in a report to Government, from which we extract the following statistics:—

The decrease in the relative numerical superiority of the males may be also shown in another manner. I assume the mortality, from natural causes, of the two sexes to be equal; and on this assumption it follows that the proportion which one sex bears to the other, among the survivors of any specified date must accurately represent the proportion which existed among those living at that date. There are now extant, of all that were living—

25 years ago	1,917 males and 12 females.
15 "	2,880 " and 98 "
5 "	4,171 " and 201 "
1 year ago	4,763 " and 290 "

* A very interesting biographical notice of Mr. Gray, by his son-in-law the late Robert Cotton Money, Esq., C. S., for some time Assistant Resident at Bhuj under Colonel Pottinger, is printed in the *Oriental Christian Spectator* for May 1831. Respecting his connexion with the Rao it is there thus written:—"Soon after Mr. Gray's arrival in Kachh [in 1826], several respectable natives, driven perhaps by curiosity alone, continually visited him; and, as some have told me, they thought a *pandit* must know more than any other man. On observing the freedom from prejudice which the inhabitants of this singular little country have, he considered it no unlikely thing to gain at last admittance to the young Rao as his preceptor. He was fortunate in possessing the friendly opinion of Colonel Pottinger on this point, whose influence as Regent during the boy's minority was meritoriously employed in cultivating the future King's mind, and moulding it to a form more suited to rule with European prudence and decision than oriental pomp and criminal partiality. By the Resident's permission, and the approbation of the other members of the regency, and to the great delight of his after favourite pupil, he commenced his labours as his tutor. He used to attend at the palace four times in the week. The liberality of Government placed in his hands the means of familiarizing the minds of the natives with the elements of Astronomy. Nothing used to delight him more than these trips, from which he returned with deeper feelings of affection for the young Rao."

It results that the males and females then living bore to each other the following relation, viz :—

25 years ago	as 159.7 to 1
15 " 	as 29.3 to 1
5 " 	as 20.7 to 1
1 " 	as 16.4 " 1

And at this moment the porportion estimated is 14.6 to 1.

Dr. Wilson goes on to describe the various stages of success reached in these provinces, in the suppression of this horrible crime. Space forbids us to follow him farther, as he shews how the influences of education, both Governmental and Missionary, gradually resulted in its almost total suppression. We sympathize with the enthusiastic missionary as he views the moral depravity of the tribes of India on the one hand and their moral renovation on the other. We may in a future Number return more at length to this interesting work. It is thus concluded :—

We augur well for the destiny of the British power in India, we would say in conclusion. By most wonderful providences, unforeseen arrangements, and remarkable deliverances and extensions, it has been established and preserved in the land. It has here found its place, not so much by our own conquest of the country, as by the voluntary submission to ourselves of the country, whose sons in almost every province have rushed to our standard and fought our battles. We have granted it deliverance from violence and oppression. We have given it peace, law, order, and religious liberty, such as it never enjoyed under any of its dynasties, the traditions of which extend long beyond the times of ancient European history. We have in reality lightened the burden of its taxation, both by lessening its amount, and calling forth to meet it the resources the country to an unwonted degree. We are giving encouragement to its agriculture by surveys and modifications of assessments and by canals for irrigation. We have imparted security and extension to its commerce. We are joining district to district and province to province, by roads and bridges, and excavations of mountain passes, and by a system of communication by steam and lighting, by land and sea and air, which its inhabitants deem miraculous. We allow its people to share in our administration, to the full extent of their present advancement in knowledge and civilization. We are seeking to elevate all its tribes in the scale of humanity. We have quenched the funeral pyre which destroyed the widow ; and we are stemming the torrents of infant blood shed by the hands of unnatural parents. We have dispersed and destroyed its bands of Thugs and Dakoits ; and Tyaga and Dharana are already terms which we have to explain to its people as well as to foreigners. Its Maryas and Poshias are passing away. Its suicides and human sacrifices are alike interdicted and prevented as far as human law can reach them. We are giving it our literature, and our art, and our science. And, above all, we are giving it our religion, even the religion of our God in heaven above, with all its unspeakable blessings for time and eternity. The night of its darkness has passed ; and its dawn has come. Its light will grow and spread, and shine more and more unto the perfect day. And a glorious day that will be to all the diversified tribes and tongues of India scattered over her gigantic holy, from "Cambay's strand" to "Ganges golden wave ;" and from the Himalaya, where she lifts her head above the clouds in the azure vault of heaven, to her Cape of Kumari, where she bathes her feet in her own ocean.

Widow-burning: A Narrative. By Henry Jeffreys Bushby, of the Inner Temple, Esq., Barrister-at-Law; late of the Hon'ble East India Company's Civil Service. London, 1855.

WE are always glad to find men who have left India, remembering her at home, and employing their talents for her good. From the neat volume before us, we learn that its author was obliged by the failure of his health to resign the Civil Service, that he went home and passed as a Barrister, that he spent "a month in the camp before Sebastopol, as a non-combatant," and that he contributed an Article on Widow-burning to the *Quarterly Review*. Of this Article, the present volume is a re-print, with additions.

The "narrative" contains a detail of several cases of Suttee that have recently occurred in the independent or protected native states, and of the efforts that have been made to induce the rulers of these states to relinquish the horrid practice. Without containing a great deal of matter, it presents several facts in a striking light, and is well fitted to call forth the interest of the thoughtful towards a matter which is still of more practical importance than is generally understood. The following picture seems to us to be well drawn:—

With rare exceptions, the Suttee is a voluntary victim. Resolute, undismayed, confident in her own inspiration, but betraying by the tone of her prophecies, which are almost always auspicious, and by the gracious acts with which she takes leave of her household, and by the gifts which she lavishes on the by-standers, that her tender womanly heart is the true source whence that inspiration flows, the child-widow has scarcely time to beveil her husband ere she makes ready to rejoin him. She is dressed like a bride, but it is as a bride who has been received within the zenana of her bridegroom. Her veil is put off, her hair unbound; and so adorned, and so exposed, she goes forth to gaze on the world for the first time, face to face, ere she leaves it. She does not blush or quail. She scarcely regards the busy crowd who press so eagerly towards her. Her lips move in momentary prayer. Paradise is in her view. She sees her husband awaiting with approbation the sacrifice which shall restore her to him, dowered with the expiation of their sins, and ennobled with a martyr's crown. What wonder if, dazzled with those visionary glories, she heeds not the shouting throng, the ominous pile? Exultingly she mounts that last earthly couch which she shall share with her lord. His head she places fondly on her lap. The priests set up their chaunt; it is a strange hymeneal, and her first-born son, walking thrice round the pile, lights the flame.

If India has been for so many years the training "school for Captains," it is not less true that it has been the scene of noble peace-victories, which, whether more or less "renowned" than those of war, are sources of far more unmingled gratification in the retrospect. It is one of the semi-oracular sayings of the great conqueror of our age, that "nothing is so sad as a victory, except a defeat." How different the feelings of Major Indlow, when contemplating the triumph which he was mainly instrumental in achieving over the ancient barbarity of the Rajpoot race! When it is tauntingly asked what the British have done for India, it would be in fair estimation a sufficient answer, though we could give no other, that they have abolished Suttee and Infanticide within their territories, and procured their abolition in so many of the protected states.

We cordially commend Mr. Bushby's Narrative to the perusal of our readers.

